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Large Volume dated October 17, 1906 - September 19, 1918 includes Committee Minutes on:

a. Experiment Department (Station)
b. Extension Service.

Signed _____

Title _____

Date _____

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UNIVERSITY OF MASSACHUSETTS

Univ. of Mass.

TRUSTEE

COMMITTEE ~~RECORDS~~

1906 – 1920

MINUTES

TRUSTEES COMMITTEE

on

EXPERIMENT DEPARTMENT.

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was taken.

MEETING OF THE EXPERIMENT STATION COMMITTEE

AT THE OFFICE OF THE DIRECTOR, OCTOBER 17TH, 1906.

There were present at the meeting Messrs. Preston, Bowker, Ellsworth, Damon and Director Brooks.

The Director gave a brief resumè concerning the results of Station activities during the last quarter.

The costs of the Sub-Station experiments with asparagus and cranberries were reported: Bills paid to date on account of asparagus experiments, $399.91; on account of cranberry experiments with fertilizers, $441.78; on cranberry insects, about $200.

The reception of the first installment of the Adams fund ($5000) at the very end of June was reported and it was stated that this fund had been used in part in payment of salaries for May and June and the balance in the purchase of scientific apparatus, chemicals, and books.

The results of the work done in connection with the "Better Farming Special," were referred to and the following statement of cost was made:

Total expenses - - - - - - - - - - - - - - -	$444.69
Received from states of New Hampshire and Vermont as their equitable share of such expense - - - - - - -	198.24

The balance defrayed by the Massachusetts Agricultural College ($246.45) was paid as follows:

From the proceeds of the Endowed Labor Fund for student labor - - - - - - - - - - - - -	$65.55
" College funds - - - - - - - - - - - - - - -	86.70
" Station funds - - - - - - - - - - - - - - -	94.20

The question as to the expediency of operating a similar train during the coming year was somewhat discussed, but no action was taken.

A statement was made concerning the bulletins and leaflets which are either ready or will be made ready for publication so far as possible previous to the opening of the next spring season. (See attached sheet A) The publication of these bulletins as fast as they can be made ready was approved.

The need of a thorough revision of the mailing list was reported. Estimates as to its cost were made. (See sheet B) The revision recommended was authorized by vote.

The installation of the Elliott Addressing System was recommended. Estimates of the cost were ~~made~~ presented and the installation of such system was voted by the Committee. (See sheet C)

A financial statement covering the balances on the 1st of October, liabilities and estimates for the ensuing quarter was made. (See sheets D, E & F) The amounts therein recommended were voted by the Committee.

The inauguration of experiments with tobacco was proposed by the Director, who was authorized by vote of the Committee to undertake such experiments.

The necessity of considerable expenditures in the near future for binding reports and bulletins and for procuring card indexes was pointed out by the Director, who was authorized by vote to make such expenditure for these purposes as may seem to him desirable.

The preparation and publication of a complete index to the reports and bulletins of the Hatch Experiment Station was recommended by the Director and he was authorized by vote of the Committee to have such index prepared and published.

The Director reported the action in the Association of American Agricultural Colleges and Experiment Stations authorizing the Committee on Graduate Study to solicit an annual contribution of $25 toward meeting expenses of the Graduate School of Agriculture and such contribution by this Station was authorized by vote of the Committee.

The Director stated his reasons for believing that it would be wise on many accounts to change the name of the Station to the Massachusetts Experiment Station and that such change would require an act of the legislature. General approval of the change was expressed, but no formal action was taken as the Director was not ready to suggest the exact name which the Station should in future bear.

After some further general discussion of needed modifications and improvements in the East Experiment Station, to fit it for its new uses, the Committee adjourned.

Wm. P. Brooks
Acting Secretary

Better farming Special	Total Expenses.		$444.69
	Rec'd from N. H. and Vt.		198.24
			246.45
Paid by:			
	Endowed Labor Fund, Student Labor	$65.55	
	College	86.70	
	Station	94.20	$246.45

A.

BULLETINS DURING ISSUING QUARTER.

Molasses and Molassew Feeds,

Fumigation Dosage for Tomatoes, (small edition) } Fernald.
Spraying Experiments, }

Fertilizer Bulletin, Nov., } Goessmann
Potato Monograph, }
Poultry Monograph, } Brooks.
Orchard Experiments, }
Nitro-Culture, }

Leaflets, } Brooks, Fernald.

Gastric Strongylosis in Sheep and Goats, Paige.

Tomato Rot, Miss Smith, 2,000--$40.00 Tech. Bulletin.

Seed Separation, Etc., by February 1, perhaps 16 pp., Stone.

General Interest.

Lettuce and Cucumber Diseases, (Hot-house,) 16--20 pp., Stone.

Pyralidae, C. H. Fernald.

REVISION OF MAILING LIST.

Probable cost:--

First set cards, 25000 @ $1.10,	$27.50
Second set cards, 15000 @ $1.00,	15.00
Envelopes, 15000 @ $1.00 per M.,	15.00
Postage, 15000 @ 1 ¢,	150.00
Printed slips, 250,	2.00
Clerical work, (est)	250.00
	$459.50

Probable cost:--

COST OF INSTALLATION OF THE ELLIOTT ADDRESSING SYSTEM.

Machine--16-1/2 inch--with Hand Feed	$85.00
5 Cabinets (5000 each) at $10.00?	50.00
1 Base	2.50
125 Metallic Drawers at 40 cents	50.00
25000 Stencil Frames at 1 cent	250.00
25000 Stencils at 1 cent	250.00
Metal Tubs at 5 cents each--est. 100	5.00
Coppered Stencil Frames for Division at 2 cts. each cts. 50	1.00
	$693.50

For better cabinest add $42.75 See leaflet

Stencil Machine, Installation of Machine $150.00

25000) (Blanks--per M $1) (Tape--per M $1) 50.00

$200.00

D

SALARY ACCOUNT.

		Annually
Brooks,		$1250
Fulton,		1000
G skill,		600
Stone,		1000
Monahan,		900
Goessmann,		2500
Haskins,		1500
Proulx,		800
Lindsey,		2000
Holland,		1500
Fernald, C. H.		600
Fernald, W. T.,		500
Waugh,		500
Ostrander,		500
Mills,		300
Ladd,		720
	Asst. Horticulturist,	660
Walker,		600
Gaskill,		600
Paige,		500
Parsons,		500
~~Barwell,~~		~~[illegible]~~
Miss Dacy,		800
Miss Smith,		540
Miss Hall,		200

4 20470,
5142,50

$5150 recommended.

/ E

QUARTERLY APPROPRIATION RECOMMENDED.

Division,	Amount.
Agriculture,	$625.00
Vegetable Pathology,	425.00
Chemistry, Fertilizer,	75.00
Chemistry, Foods & Feeding,	75.00
Horticultural,	375.00
Entomological,	275.00
Meterological,	150.00
Veterinary,	------
	$2000.00

F I N A N C E S .

Balances Oct. 1	(State	$6,389.48
	)Hatch	519.26
	(Adams	1,370.32
		Total Balances $8279.06
Funds--Oct. Payments	(State	$2625.00
	)Hatch	3750.00
	(Adams	1750.00
		" Funds 8125.00
		Total Resources $16404.06

Expenditures *recommended*

Salaries for Sept. unpaid Oct. 1	$ 219.59	
Salary	5150.00	
Division appropriations	2000.00	
Bulletins	1400.00	
Installation of addressing system	750.00	
Revision mailing lists	460.00	
Furniture	125.00	
Plumbing	100.00	
Repairs, West Station	50.00	
Hard wood floors	160.00	
Painting walls, laboratory & office	100.00	
Administrative sundries	500.00	
Delegates to Asso. Meetings est.	125.00	
" " Meeting Of. Agric. Chem.	20.00	
Creamer for F. & F. Div.	35.00	
Fire extinguishers--4 at $15	60.00	
" hose for 4 buildings and hooks for same	175.00	
Extension of 2" pipe Chemical Laboratory	15.00	
Already voted: (June Meeting)		
Hood for Chemical Division	250.00	
Room and building changes	125.00	
Incurred, but not paid:		
Asparagus (est.)	150.00	
Cranberry "	50.00	
Index, Preparation of	50.00	$12069.59

MEETING OF COMMITTEE ON EXPERIMENT STATION, MARCH 26, 1908.

In accordance with notice, a meeting of the Committee on the Experiment Station was held in the Amherst House parlors, Amherst, March 26th, 1908, there being present: Messrs. Preston and Damon, President Butterfield and Director Brooks. There were also present by invitation, Fred. C. Kenney, Treasurer, and the following heads of departments: Lindsey, Stone, H. T. Fernald, Ostrander and Paige.

These heads of departments each presented a written statement covering in a general way the work in his department during the past year and plans for the future.

Director Brooks read a similar statement which had been prepared by the head of the Department of Horticulture, Prof. Waugh, who was unable to be present.

Director Brooks also presented a statement concerning the work and plans of the Agricultural Department of the Station.

Director Brooks presented statements which are hereto appended as follows:

1. A statement showing the publications of the Station during the year March 1st, 1907 to March 1st, 1908, giving the number of pages in each, the size of the edition and the cost. (page 5)

2. A statement showing the expenditures at the asparagus sub station in Concord, for the Cranberry insect investigations in Wareham, and the cranberry fertilizer experiments in Falmouth. (page 6).

3. A statement of the cost of fertilizer control from April 1st, 1907 to January 1st, 1908. (page 7).

4. A statement showing the expenditures and balances in the different departments of the Experiment Station for the quarter December 1st, 1907 to March 1st. 1908. (page 8)

5. A statement of salaries recommended for all those on the salary list of the Station for the year July 1st, 1908 to July 1st, 1909, showing the amount of increase or decrease in all cases where changes were recommended. (page 9)

The Director read a letter from Dr. Lindsey, the head of the Department of Plant and Animal Chemistry, recommending that if possible the salary of Mr. Holland be raised to $1800 per annum, that of Mr. Haskins to $1800, and that of Mr. Smith to $1400 per annum.

Discussion having developed the fact that most of the changes were recommended to take effect July 1st, action on the full salary list was not taken, but on motion of Mr. Damon, it was

VOTED: That the salary of Mr. Pomeroy at present $960 per annum be raised to $1000, the change to be dated from March 1st, 1908.

The Treasurer, Mr. F. C. Kenney, presented a statement copy of which is appended (page 10), showing the financial transactions and balances in each department of expenditure of the Station during the quarter ending February 29th, 1908.

The Director presented a statement showing the estimated resources of the Station for the year March 1st, 1908 to March 1st, 1909 and the apportionment of Station funds recommended for that year. This statement is hereto appended. (Sheet A).

On motion of President Butterfield, it was

VOTED: That the apportionment recommended for salaries be approved subject to such changes as may be made at the June meeting.

On motion of Mr. Damon, it was

VOTED: That the apportionments recommended for the several departments of the Experiment Station be approved. (Sheet A).

VOTED: That the appropriations recommended for the sub stations be approved. (Sheet A).

VOTED: That the appropriations recommended for general expenses be approved. (Sheet A).

VOTED: That the appropriation recommended for repairs, painting, etc., be approved. (Sheet A).

The Treasurer, Mr. Kenney stated that in his judgment the Station should contribute towards the office expenses of the Treasurer's office. On motion of Mr. Damon, it was

VOTED: That there be appropriated for expenses of the Treasurer's office the amount of $400.

The meeting adjourned.

FINANCIAL STATEMENT.

March 25, 1908.

Balance, March 1st, 1908, - - - - - - - - -		$ 6683.98	
Resources to March 1st, 1909)	(State - - -	10500.00	
	Hatch - - -	15000.00	
	(Adams - - -	10500.00	
	(Fert. Fees -	5000.00	
Total -			$47683.98
Balance Appropriations, - - - - - - - - - - -		1223.60	
APPROPRIATIONS RECOMMENDED: March 1st, 1908 to March 1st, 1909			
Salary, - - - - - - - - - - - - - - - - - - -		25745.00	
Departments:			
Chemistry - - - - - - - - -	$3400		
Agriculture - - - - - - - -	2480		
Horticulture - - - - - - -	1500		
Botany & Veg. Pathology - -	1400		
Entomology - - - - - - - -	800		
Veterinary - - - - - - - -	400		
Meteorology - - - - - - - -	200	10180.00	
Sub Stations:			
Asparagus - - - - - - - - -	1100		
Cranberry - - - - - - - - -	900		
Graves Orchard - - - - - -	500	2500.00	
General:			
Administration. (Clerical, Travel, Postage, Stationery, etc.)	2000		
Publication - - - - - - - -	3300		
Library - - - - - - - - - -	300		
Office Furniture - - - - -	150		
Binding Reports and Bulletins	100		
Freight & Express - - - - -	250		
Bulletin & Report Envelopes	300	6400.00	
Repairs, painting, etc., - - - - - - - - - -		250.00	46298.60
			$1385.38

P U B L I C A T I O N S .

March 1, 1907 to March 1, 1908.

No.	Title.	Pages.	Edition.	Cost.
	Index, Hatch Experiment Station - - - -	48	3500	$176.00
116	San Jose Scale - - - - - - - - - - - -	22	15000	243.00
117	Trade Values and Fertilizers - - - - -	22	4500	90.75
118	Molasses and Molasses Feeds - - - - - -	32	20000	382.00
119	Inspection of Commercial Fertilizers -	64	16000	738.00
120	Inspection of Commercial Feed Stuffs -	48	16000	452.50
121	Seed Separation and Germination - - - -	14	3500	54.00
Tech. 3	Blossom End Rot of Tomatoes - - - - - -	19	3000	66.75
	Circulars.			
1	Cotton Seed Meal - - - - - - - - - - -	8	1000	25.75
2	Cutworms - - - - - - - - - - - - - - -	2	500)	
3	The Apple Maggot - - - - - - - - - - -	3	500)	
4	Wire Worms - - - - - - - - - - - - - -	2	500(	18.00
5	Root Maggots - - - - - - - - - - - - -	2	500)	
6	The Lecaniums or Soft Scales - - - - -	3	500)	
7	Ants - - - - - - - - - - - - - - - - - -	2	500	3.75
8	List of Bulletins - - - - - - - - - - -	12	600	43.00
9	Rules Relative to Testing Dairy Cows -	6	250	9.75
10	The Sampling of Fertilizers, Soils and Feed Stuffs for Free Examination -	3	250	6.00
11	Chemical Analysis of Soils - - - - - -	2	500	3.00
12	The Unprofitable Cow and How to Detect Her - - - - - - - - - - - - - - -	4		

Total -$2332.25

ASPARAGUS SUB STATION.

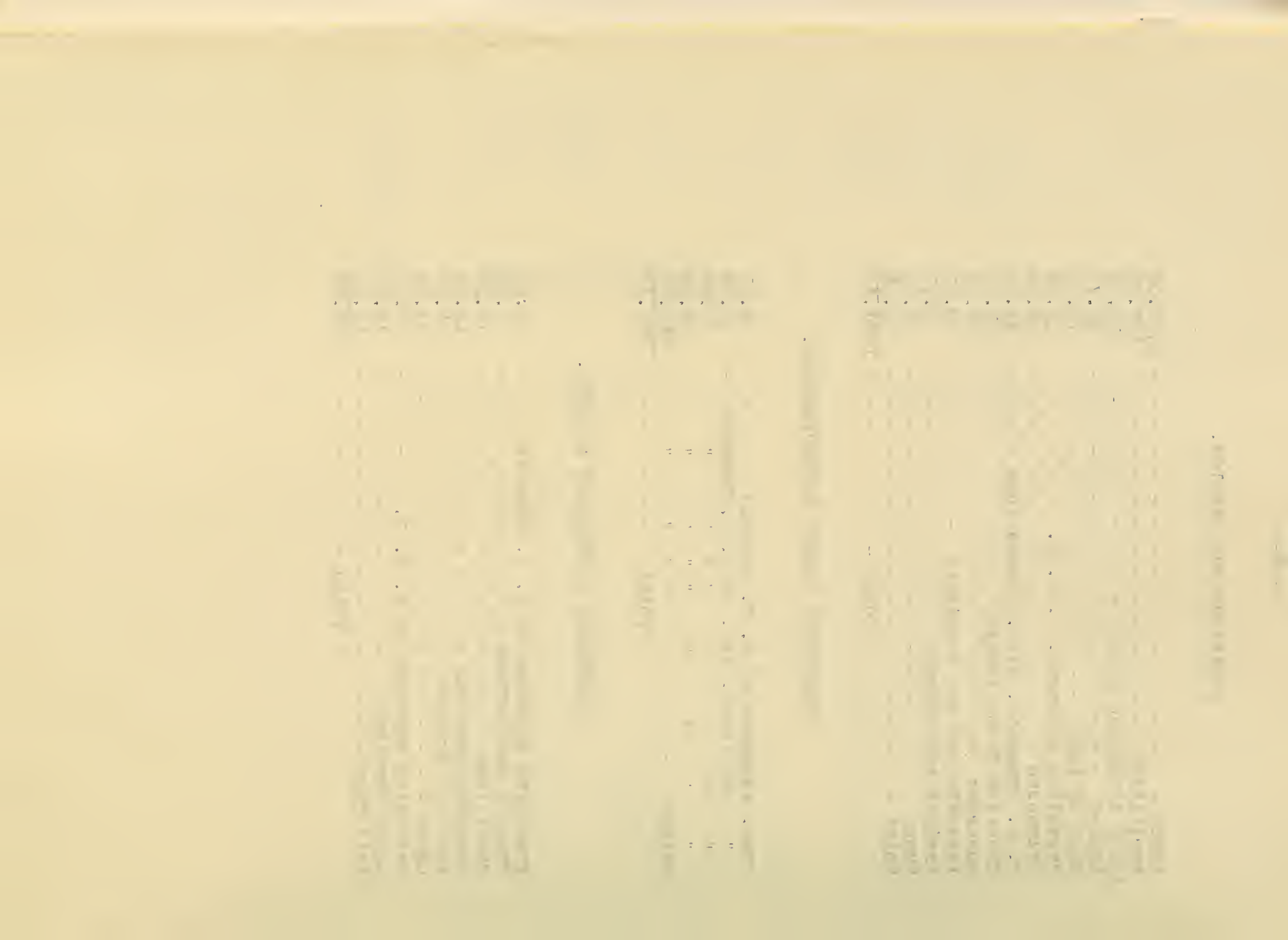
Labor	$944.02
Fertilizer	127.85
15000 Asparagus roots	75.00
Stakes	26.75
Rent of land	75.00
Traveling expenses. W. P. B.	16.88
Telephone	8.42
C. W. Prescott. Bldg. foundations	41.00
Erection of buildings	257.00
Sundries	39.37
Insecticides and chemicals	10.73
Freight and Express	9.77
Pump	6.35
Paint	2.96
Total	1641.10

CRANBERRY INSECT INVESTIGATION.

Trav. expenses of H. T. Fernald	8.97
" and incid. exp. of H. J. Franklin	56.98
" " " " " " " "	70.26
" " " " " " " "	90.89
Salary " " " "	650.00
Total	877.10

CRANBERRY FERTILIZER ACCOUNT.

Traveling Expenses of H. J. Franklin	4.60
Freight and Cartage	3.22
Fertilizer	18.18
Spraying material	14.60
Lime and Express	4.60
Labor	75.76
Traveling expenses of W. P. B.	24.36
Legal Services	10.00
Soil Tube	10.00
Total	165.32



STATEMENT OF COST OF FERTILIZER CONTROL.

April 1, 1907 to Jan. 1, 1908.

Laboratory work--April 1 to July 1,	$1977.29	
" " July 1 " Jan. 1,	2445.40	
	4422.69	
Less 500 determinations not fertilizers, - - - - - - - - - - -	689.93	$3732.76
Traveling expenses, -		389.23
Bulletins--16000, -		738.00
Envelopes and labor sending bulletin, - - - - - - - - -		56.06
		$4916.05

Received from License fees, - - - - - - - $5035.00

MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION.

DEPARTMENT ACCOUNTS.

Dec. 1, 1907 - March 1, 1908.

Dept. or Acct.	Adams	Hatch	State	Totals	Credits	Appropriated		Balances.	
Administration	-----	$126.80	$330.91	$457.71	$66.55	$825.00	est.	+	$433.84
Agricultural	-----	604.26	527.68	1131.94	917.13	620.00		+	405.19
Horticultural	-----	26.70	11.76	38.46	10.00	375.00		+	346.54
Chemical	-----	769.54	1161.99	1931.53	1418.47	800.00	"	+	286.94
Bot. & Veg. Path.	$216.29	71.35	125.23	412.87	8.92	350.00		-	53.95
Entomological	90.00	141.22	146.19	377.41	- -	275.00		-	102.41
Veterinary	-----	23.75	75.65	99.40	- -	100.00		+	0.60
Meteorological	-----	3.00	49.01	52.01	- -	50.00		-	2.01
Salary	1800.00	1793.24	2514.26	6107.50	- -	5935.00		-	172.50
Publication	-----	172.07	1180.48	1352.55	- -	1365.00	"	+	12.45
Fgt. & Express	-----	33.97	18.30	52.27	- -	100.00	"	+	47.73
Treasurer's Office	-----	30.08	- -	30.08	- -	- -		-	30.08
Asparagus	7.03	- -	306.90	313.93	- -	150.00	"	-	163.93
Cranberry	10.00	- -	- -	10.00	- -	180.00	"	+	170.00
Graves Orchard	-----	4.81	- -	4.81	- -	50.00	"	+	45.19
Totals	$2123.32	$3800.79	$6448.36	$12372.47	$2421.07	$11175.00		+	1223.60

ESTIMATE OF STATION SALARIES FOR YEAR JULY 1st, 1908 - JULY 1st, 1909.

Name	Amt. per Year.		Increase.	Decrease.
Brooks	$2300			
Goessmann	1000			
C. H. Fernald	600			
H. T. Fernald	1000			
Stone	1300			
Waugh	400			- $100
Sears	250		+ $250	- 150 White
Ostrander	500			
Paige	500	?		- 500
Kenney	500			
Lindsey	2500			
Holland	1700		+ 100	
Haskins	1700		+ 100	
Fulton	1300		+ 100	
E. F. Gaskill	900		+ 100	
Chapman	800		+ 80	
Goldsmith	800	(fr. Jan. 1, 1909)	+ 100	
Reed	800	(fr. Jan. 1, 1909)	+ 100	
Pomeroy	1000	(fr. March 1, 1908)	+ 40	
Walker	900		+ 100	
Roy Gaskill	600			
Summers (Trans. to Salary)	360	(1/2 time)		
MacLaurin	1500	(+$300 from College)		
Secretary	800	(est.)		- 60
Miss Cobb	600		+ 60	
" Crocker	540			
" Hall	200			
Dr. Fernald's Stenographer (Trans. to Salary)	480		+ 480	
	$25830.00		+$1610.00	- $810

Feed Law

Smith	1300		+ 100	
Hepburn	600			
	$1900		+ 100	

--EXPERIMENT STATION--

Treasurer's Report

First Quarter ending Feby. 29, 1908.

Department Account.	Disbursements	Receipts	Apportionment	Department Balance
Administration	421.91	66.55	725.00	369.64
Agricultural	992.03	872.65	620.00	500.62
Asparagus	313.93		150.00	163.93
Botanical	412.87	9.22	350.00	53.65
Chemical	1,756.06	1,570.11	800.00	614.05
Cranberry	10.00		180.00	170.00
Entomological	373.41		275.00	98.41
Freight	54.05		100.00	45.95
Feed Law	609.86	1,503.78	469.34*	1,363.26
Graves Orchard	4.81		50.00	45.19
Horticultural	36.86	10.00	375.00	348.14
Library			100.00	100.00
Meteorology	50.96		50.00	.96
Publications	1,349.40		1,365.00	15.60
Salaries	6,107.50		5,935.00	172.50
Treasurer's O.	30.08			30.08
Veterinary	90.40		100.00	9.60
Hatch Fund		3,750.00		
Adams "		2,250.00		
State		5,250.00		
	12,614.13	15,282.31	11,644.34	3,062.52
Cash on hand Dec. 1, 1907		5,719.94		
Cash on hand Feb. 29, 1908	8,388.12			
	21,002.25	21,002.25	11,644.34	3,062.52

*This balance was brought forward from November 30, 1907.

MEETING OF COMMITTEE OF THE BOARD OF TRUSTEES

ON THE MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION, CONCORD.

June 24, 1908.

In accordance with notice, a meeting of the Committee on the Experiment Station was held in Concord, at the home of Mr. W. H. Bowker, June 24th, 1908, there being present: Messrs. Preston, Ellsworth, Bowker, Rawson, Damon, and Director Brooks.

The meeting was called to order by the Chairman of the Committee, Mr. Preston.

The Director presented a statement (Sheet A, hereto appended) showing the salaries proposed for all those employed in the Experiment Station, all changes indicated, unless otherwise specified to begin July 1st, 1908.

After some discussion it was

VOTED: (1) That it is the sense of this Committee that the amount contributed by the Station to the salary of Dr. James B. Paige should be reduced.

(2) That the rates of salary as proposed by the Director be adopted, the Chairman, Mr. Preston, expressing a desire after the vote that it be recorded that he personally favored increasing the salary of Messrs. Holland and Haskins to $1800 per year.

The Director briefly outlined plans under consideration for the publication in co-operation with the Massachusetts Forestry Association of a bulletin on shade trees substantially as follows: Dr. Stone to contribute a discussion of the various species and varieties of trees adapted for use as shade trees, methods of planting and caring for them, injuries from gas and electricity and methods of preventing the same, methods of bolting, chaining, etc., common diseases and their prevention or cure: Dr. Fernald to discuss insects and the proper treatment to be adopted for the protection of trees from their different more important insect foes and Mr. E. A. Start,

of the Massachusetts Forestry Association to contribute a chapter on the state laws pertaining to shade trees and the duties of tree wardens.

The Director recommended publication of such a bulletin on the basis of due credit indicated on the title page to the Massachusetts Forestry Association for its contribution both editorial and financial; cost to be divided equally between the Station and the Forestry Association and the bulletin to be circulated under the Station frank.

It was moved and VOTED: That the publication of such a bulletin on the conditions above outlined be authorized.

The Director then recommended the publication of a bulletin on bee diseases in Massachusetts, written by Burton N. Gates, Expert Apiculturist of the Division of Entomology of the Department of Agriculture, Washington, D. C., from plates to be purchased of the government.

It was moved and VOTED: That the Director be authorized to make any publications in his judgment desirable.

The Director recommended the adoption of a new scale of prices for making official tests of dairy cows as proposed in writing by Doctor J. B. Lindsey:

VOTED TO APPROVE the scale of prices proposed as hereto appended (Sheet B).

The meeting then adjourned.

STATION SALARIES FOR YEAR, July 1st, 1908 -- July 1st, 1909.

Office	Name	Amt. per Year	Increase*	Decrease
Director & Agriculturist	Brooks	$2300		
Honorary Director & Consulting Chemical Expert	Goessmann	1000		
Chemist	Lindsey	2500		
Botanist	Stone	1300		
Entomologist	C. H. Fernald	600		
Horticulturist	Waugh	400₂		-$100
Meteorologist	Ostrander	500		
Veterinarian	Paige	1000		
Associate Entomologist	H. T. Fernald	1000		
Associate Chemist (Research Division)	Holland	1700	+ $100	
Chemist in Charge (Fertilizer Division)	Haskins	1700	+ 100	
Chemist in Charge (Feed & Dairy Division)	Smith	1300	+ 100	
Assistant Agriculturist	Fulton	1300	+ 100	
2nd Ass't " & Librarian	E. F. Gaskill	900	+ 100	
Assistant Chemist (Research Division)	MacLaurin	1500		
Assistant Chemist (Feed & Dairy Division)	Walker	900	+ 100	
Assistant Chemist	Goldsmith	800₃	+ 100	
" "	Reed	800₃	+ 100	
" Botanist	Chapman	1000	+ 280	
" Horticulturist	Pomeroy	1000		
Pomologist	Sears (new)	250₂		
Inspector	Hepburn	600		
Assistant in Animal Nutrition	Roy Gaskill	600		
Assistant in Entomology	Summers	360 (1/2 time)		
Treasurer	Kenney	500		
Librarian	Miss Hall	200		
Secretary	" Brown	720		
Stenographer	" Cobb	600	+ 60	
"	" Crocker	540		
"	" O'Donnell	432		
		$28302	+ 1140	- 100

Cranberry Insect Work Johnson
$1 per day, actual service and expenses when on duty.

* To date from July 1st unless otherwise specified.
₂ From Sept. 1st, 1908.
₃ From Jan. 1st, 1909.

SCALE OF PRICES FOR TESTS OF DAIRY COWS.

(1) The charge for a single day's test, when made in a sequence with others of a similar character, shall be $5.00. Additional days for the same party shall be at the rate of $2.75 per day. In case these monthly short tests should ~~be~~ seriously decrease in number, it may be necessary in the future to advance the above charges.

(2) The charge for a seven day test shall be $25.00. An allowance of nine consecutive days will be made, which shall include the tester's time while en route. Additional days beyond the nine day limit will be charged for at the rate of $2.75 per day.

(3) The charge for a thirty consecutive day test will be $80.00 and 32 days will be allowed, which shall include the tester's time en route. Additional days beyond the thirty-two day limit will be at the rate of $2.50 per day.

(4) The above statement includes all expense, excepting that as heretofore, the owner of the stock must, at his expense, care for the supervisor during the test, and when necessary, convey him to and from the railroad station or car line.

MEETING OF COMMITTEE ON EXPERIMENT DEPARTMENT.

STATE HOUSE, BOSTON, MASS., JANUARY 7, 1909.

PRESENT: Messrs. Preston, Bowker, Damon, Ellsworth, President Butterfield, Director Brooks, and Treasurer Kenney.

The Director presented papers showing the nature of station expenditures for the year July 1, 1907 to July 1, 1908, (sheet A hereto appended); also papers showing the standing of the different funds and the expenditures in the different departments, and the balances for the period March 1, 1908 to December 31, 1908, (sheet B hereto appended).

The Treasurer presented a financial report of the station for the fiscal year December 1, 1907 to November 30, 1908 (sheet C appended).

The Director reported changes and improvements in the chemical laboratory made to meet an emergency, costing about $200 and paid from ordinary station funds, and it was

VOTED: To approve these changes and expenditures.

The Director reported that the changes and improvements in the east experiment station building to fit it for administrative purposes, provided for by special legislative appropriation in 1908 had been carried out and that the results were very satisfactory. The Treasurer later in the meeting made a more detailed statement covering the changes in the administration building and also in the chemical laboratory, and the cost of the same, and reported a small unexpended balance.

The Director reported steps which had been taken to get the libraries of the state to accept and care for station publications resulting in an increase in the number of libraries on the mailing list from 40 to 321, and the sending out of a large number of reports and bulletins.

The Director also reported having sent the shade tree bulletin to tree wardens and others specially interested in shade trees in other states, principally Rhode Island, Connecticut, and Maine.

The Director reported items which he had recommended to the President in the legislative budget for 1909 (sheet D appended), and it was

VOTED: That the items be approved by this committee and recommended to the full board of trustees.

On motion of the Director, it was
VOTED: To print the tables presenting the average results of analyses of fertilizers, feeds, etc., in annual reports once in five years instead of once in four years as heretofore.

The Director reported the appointment, with the approval of President Butterfield, and subject to ratification by this committee, of Jacob K. Shaw as assistant in the department of horticulture to take the place of Carl S. Pomeroy, resigned, at a salary of nine hundred ($900) dollars per year, beginning October 1, 1908; it was
VOTED: To approve his engagement.

President Butterfield spoke of the disadvantage of making station apportionments at a date not coincident with the college fiscal year, and also of a plan for the submission of statement of projects by station workers; on his motion, it was
VOTED: That the Director, the President, and the Treasurer be a committee to consider these matters.

The Director recommended that the salaries of P. V. Goldsmith and James C. Reed be raised to nine hundred ($900) dollars per year, the increase to take effect January 1, 1909; after some discussion this increase was VOTED.

The Director reported that the experiment station has been criticised by some Holstein-Fresian breeders for making the increases in the scale of charges for testing pure bred cows approved at the meeting of this committee in June last, and read a letter from Dr. Lindsey stating his views in relation to the matter, and also quotations from a letter of Professor Woll of Wisconsin, relating to expenses in that state (sheets E appended hereto). No action was taken.

The Director moved the amendment of Sec. 4 of Chap. 202 of the Acts and Resolves of Massachusetts for 1901 (Dairy Laws) by the addition of the following:

"If the duly authorized inspector finds an operator who, after receiving his certificate of competency, in his judgment is not correctly manipulating the Babcock or other test used as a basis for determining the value of milk and cream, or who is using dirty, untested, or otherwise unsatisfactory glassware, he shall immediately report the case in writing to the Director of the station. Said Director shall at once notify said operator in writing and give him not less than thirty (30) days to make the necessary improvements. At the expiration of this time said Director may order a second inspection, the cost of which shall be borne by the operator or by the creamery or milk depot by which he is employed, and if the required improvement has not been made, said Director is empowered to notify in writing said operator or the creamery or milk depot employing him, that the certificate of competency is revoked. In

case of future violations said Director shall revoke the certificate of competency immediately."

VOTED: To authorize the Director to endeavor to secure such amendment.

The recommendation, primarily from Mr. P. H. Smith and approved by Dr. Lindsey to the effect that Section 3 of the same laws be amended to provide an annual appropriation of four hundred ($400) dollars for the payment of expenses of the inspection of centrifugal or other machines used by any person, firm or corporation, or by any agent or employee thereof, for the testing of milk or cream in fixing the value thereof, was presented by the Director but not adopted.

The Director reported that in his judgment it is desirable that the state of Massachusetts pass a law providing for the appointment of an inspector of apiaries, and for the surpression and control of contagious bee diseases, and stated that the Massachusetts Bee Keepers' Association at a meeting on January 2nd voted to ask the Massachusetts Agricultural Experiment Station to draft such a law and provide therein that it be executed by the station; this draft to be considered in conference with bee keepers as to final form. After discussion it was

VOTED: To authorize the Director to comply with the request of the Massachusetts Bee Keepers' Association.

ADJOURNED.

MINUTES OF MEETING OF COMMITTEE ON EXPERIMENT DEPARTMENT.

Amherst, Mass., March 12, 1909, at 5.00 P. M.

Present: Messrs Preston, Bowker, Ellsworth, Damon, Pollard, President Butterfield, and Director Brooks.

The first business of the meeting was listening to reports and plans of the different heads of departments. Such reports were read by Dr. Lindsey, Dr. Fernald, Professor Ostrander, and Dr. Paige. Director Brooks read a report which had been prepared by Professor Waugh. The absence of Dr. Stone was explained, and it was

VOTED: That his written report to be later submitted, be manifolded and a copy sent to each member of the committee.

Without formal vote it was understood that the report of the Director should be similarly manifolded and distributed.

The publication in the form of a bulletin of a summary of meteorological observations for the past twenty years was discussed, and the members of the committee signified their approval of such publication, to include if possible, also some of the observations taken at an earlier period by Professor Snell and his daughters.

On motion of the Director, it was

VOTED: That as recommended in Professor Waugh's report, the following lines of experiment shall be placed in charge of Professor Sears as Pomologist:
1. The propagation of fruit trees with particular reference to mutual influence of stock and cion.
2. Pruning of fruit trees.
3. Systematic study of varieties of fruit.

The necessity for extensive additions to the laboratory and

to provide further facilities for work in the chemical department of the station was presented by Dr. Lindsey, and fully discussed.

The question of using any portion of the labor fund for work which is educational in its nature but primarily for the station was also discussed. No votes were passed on either subject.

Director Brooks presented statements which are hereto appended, as follows:

1. Showing the publications of the station during the year March 1, 1908 to March 1, 1909, giving the number of pages in each, size of edition, and cost. (Page 4)

2. Showing the expenditures for cranberry insect investigations in Wareham, and cranberry fertilizer experiments in Falmouth. (Page 5)

3. Showing the expenditures at the asparagus substation in Concord, and at Graves' orchard in South Amherst. (Page 6)

4. Showing the cost of the fertilizer control work from January 1, 1908 to January 1, 1909. (Page 7)

5. Showing the expenditures and balances in the different departments of expenditure of the experiment station for the year March 1, 1908 to March 1, 1909.(Page 8)

6. A statement of the salaries recommended for all those on the salary list of the experiment station and showing the amounts of increases and the changes of apportionment between the college and station. (Page 9)

Certain features of the last fertilizer bulletin were discussed at length, as were also the methods of keeping accounts of the cost of the fertilizer inspection, and it was

VOTED: That the Treasurer be instructed to keep accounts of the cost of fertilizer inspection separate in so far as may be found possible.

On motion of Mr. Bowker, it was

VOTED: That the salaries as recommended by the Director (Page 9) be authorized.

On motion of Mr. Bowker, it was

VOTED: That the appropriations as recommended by the Director shown on page 10 hereto appended, be authorized for the period of March 1, 1909, to December 1, 1909.

Adjourned.

Wm. P. Brooks,

Act. Secretary.

PUBLICATIONS

March 1, 1908 to March 1, 1909.

Number	Title	Pages	Edition	Cost
	BULLETINS			
122	Poultry Keeping for Egg Production	64	20,000	$689.00
123	Fungicides and Insecticides	32	25,000	420.00
124	Bee Diseases in Massachusetts	12	4,000	79.20
125	Shade Trees	64	5,000	154.80
126	How to Fight Cranberry Insects	12	3,000	31.75
127	Inspection of Commercial Fertilizers	68	18,000	774.00
128	Inspection of Commercial Feed Stuffs	56	16,000	507.00
	CIRCULARS			
13	Laws Regulating the Sale of Commercial Fertilizers for Massachusetts	4	500	17.60
14	Fertilizers for Potatoes	4	500	6.50
15	Cost of Testing Pure Bred Cows	2	100	1.75
16	Seeding Mowings	8	500	12.00
17	An Act to Regulate the Sale of Concentrated Commercial Feed Stuffs	4	500	6.00
18	Alfalfa as a Crop in Massachusetts	4	18,000	54.00
19	The White Fly	2	200	3.00
20	The Use of Lime in Massachusetts Agriculture	6	2,000	15.90
21	Control of Onion Smut	2	500	3.50
	OTHER PUBLICATIONS			
	Meteorological Bulletins for 12 months @ $11.50		300	138.00
	Separata of insect portion of Bulletin 125		300	7.50
	Pamphlet on "Corn as a Grain Crops"		500	9.40
			TOTAL	$2930.90

CRANBERRY INSECT INVESTIGATION ACCOUNT.

March 1, 1908 to March 1, 1909.

Labor - - - - - - - - - - - -	$ 28.00
Traveling expenses - - - - - - -	91.71
Postage, stationery and supplies -	70.27
	$189.98

Cranberry Fertilizer Account.

March 1, 1908 to March 1, 1909.

Fertilizer - - - - - - - - - -	$ 15.68
Traveling expenses - - - - - - -	14.00
Cartage and express - - - - - - -	8.11
	$ 37.79

Total for cranberry work - - - - $227.77

ASPARAGUS SUBSTATION EXPENSES.

March 1, 1908 to March 1, 1909.

Labor	$ 963.13
Fertilizers	295.83
Rent of land	90.00
Traveling expenses	28.80
Telephone	10.75
Freight and express	16.63
Sundries	8.77
Hay for covering plants	20.00
Wind shield and material for tent	114.82
Paint	5.85
Chemicals and insecticides	31.50
Roots	7.50
	$1593.58

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GRAVE'S ORCHARD.

Labor	$ 119.76
Cover crops	28.95
Rent of land	75.00
Fertilizers	51.00
	$ 274.71

STATEMENT OF COST OF FERTILIZER CONTROL.

January 1, 1908 to January 1, 1909.

Laboratory work - - - - - - - -	$4359.32	
Less determinations not fertilizers	479.52	$3880.80
Traveling expenses - - - - - - - - - -		384.41
Inspectors' salaries - - - - - - - - -		234.00
Bulletin, 18,000 - - - - - - - - - - -		774.00
Envelopes and labor sending out bulletin - -		56.06
		$5329.27

Received from license fees - - - - - - $5335.00

DEPARTMENT ACCOUNTS

March 1, 1908 to March 1, 1909.

Dept. or Account	Adams	Hatch	State	Totals	Credits.	Appro.	Balance Mar.1,08.	Balance Mar.1,09
Administration	-----	137.38	1796.05	1933.43	-----	2150.00	+ 433.84	+ 650.41
Agricultural	-----	509.59	4493.64	5003.23	2584.43	2480.00	+ 405.19	+ 466.39
Asparagus	925.26	-----	668.32	1593.58	-----	1100.00	- 163.93	- 657.51
Botanical	-----	273.20	926.07	1199.27	19.87	1400.00	- 53.95	+ 166.55
Chemical	501.10	857.39	6513.17	7871.66	4448.85	3400.00	+ 286.94	+ 264.13
Cranberry	41.06	-----	186.71	227.77	-----	900.00	+ 170.00	+ 842.23
Entomological	90.00	27.08	163.81	280.89	-----	800.00	- 102.41	+ 416.70
Freight and Express	-----	71.77	459.58	531.35	-----	250.00	+ 47.73	- 233.62
Graves' Orchard	-----	177.86	96.85	274.71	-----	500.00	+ 45.19	+ 270.48
Horticultural	21.75	104.03	939.76	1065.54	2.00	1500.00	+ 346.54	+ 783.00
Library	-----	153.62	174.56	328.18	-----	300.00	-----	- 28.18
License Fees	-----	-----	-----	-----	5505.00	-----	-----	-----
Meteorological	-----	-----	63.64	63.64	-----	200.00	- 2.01	+ 134.35
Publications	-----	759.66	2183.51	2943.17	107.98	3300.00	+ 12.45	- 522.74
Repairs and Paint	-----	-----	427.39	427.39	-----	250.00	-----	- 177.39
Salaries	6389.95	10658.34	9278.05	26326.34	-----	25745.00	- 172.50	- 753.86
Treasurer's Office	-----	134.15	99.97	234.12	-----	400.00	- 30.08	+ 134.35
Veterinary	-----	5.80	99.29	105.09	-----	400.00	+ .60	+ 295.51
TOTALS	$7969.12	13869.87	28570.37	50409.36	12665.13	45075.00	+1223.60	+2052.25

ANNUAL SALARIES RECOMMENDED

Name	Amt. per year	Amt. and date of increase
Brooks	$ 3000	
Goessmann	1000	
C. H. Fernald	600	
H. T. Fernald	1000	
Stone	1300	
Waugh	400	
Sears	250	
Ostrander	500	
Paige	500	($500 decrease)
Kenney	500	
Lindsey	2500	
Holland	1900	$200 after July 1, 1909
Haskins	1900	200 after July 1, 1909
Fulton	1300	
E. F. Gaskill	1000	100 after July 1, 1909
Chapman	1000	
Goldsmith	1000	100 after Jan. 1, 1910
Reed	1000	100 after Jan. 1, 1910
Shaw	1000	100 after Oct. 1, 1909
Walker	1000	100 after July 1, 1909
Roy Gaskill	660	60 after July 1, 1909
Summers	360	(½ time)
MacLaurin	1200	+ 600 from college to Sept. 1st.
Green	200	
Miss Brown	800	80 after July 1, 1909
Miss Cobb	680	80 after July 1, 1909
Miss Crocker	620	80 after July 1, 1909
Miss O'Donnell	560	80 after July 1, 1909
	$27730	

Feed Law

Smith	1500	200 after July 1, 1909
Howard	780	60 after March 1, 1909
TOTAL	$30010.00	

FINANCIAL STATEMENT. March 12, 1909.

Balance (Treasurer's) March 1, 1909 - - - - -			$ 5,830.40
Resources to Dec. 1, 1909	State - - - - - -		7,875.00
	Hatch - - - - - -		11,250.00
	Adams - - - - - -		9,375.00
	Fertilizer fees - -		5,300.00(est)
	Receipts, Agr. department		2,000.00(")
	Receipts, Chem. dept.		3,300.00(")
TOTAL - - - - - - - - - - - - - -			$44,930.40

Expenditures:

Balances to credit departments - - - -		$3,312.84	
Receipts, depts. of Agriculture and Chem.		5,300.00	
Appropriations recommended, Mar. 1,-Dec. 1:			
Salaries - - - - - - - - - - - - - -		20,975.00	
Departments:			
Chemistry - - -	$2,550. + receipts		
Agriculture - -	1,800. + receipts		
Horticulture - -	400.		
Botany - - - -	900.		
Entomology- - -	375.		
Treasurer's office	260.	6,285.00	
Sub-stations:			
Asparagus - - -	1,400.		
Cranberry - - -	500.		
Graves' orchard -	50.	1,950.00	
General:			
Administration (Clerical, travel, postage, lawns, stationery, etc.)	900.		
Publication - - -	3,000.		
Library - - - -	225.		
Binding publications	150.		
Freight and express	450.		
Envelopes (bul.& rep)	300.		
Repairs, painting,	300.	5,325.00	
TOTAL - - - - - - - - - - - - - -			-43,147.84
			$ 1,782.56

MEETING OF EXPERIMENT STATION COMMITTEE.

BOSTON, MASS., JUNE 18, 1909.

PRESENT: Messrs. Preston, Ellsworth, Damon, Pollard, President Butterfield, and Director Brooks.

The meeting was called to order by the Chairman, Mr. Preston.

Director Brooks stated in considerable detail his views relative to work in Massachusetts by the United States Department of Agriculture. He expressed his conviction that the policy should be to endeavor in all possible ways to secure cooperative rather than independent work. An informal expression of views from some of the members of the committee present was in general favorable to the policy advocated by the Director.

The Director next called attention to the fact that the agreement with Dr. Galloway relative to cooperative work with asparagus in Concord had been somewhat modified. The modifications agreed upon, without giving up any of the advantages secured by the original agreement, provide that the Department of Agriculture, to the extent of a sum not exceeding $1,000 will meet the local expenses of the work in breeding for the production of new varieties.

The Director then presented the agreement which had been provisionally adopted between himself, representing the station, and Dr. Galloway, representing the Bureau of Plant Industry, Department of Agriculture, and also the form of agreement between the Director and individual growers who are to conduct experiments on tobacco, and it was

VOTED: To ratify these agreements.

The Director called attention to the convention of the American Association of Agricultural Colleges and Experiment Stations to be held in Portland, Oregon, August 18th to 20th, and it was

VOTED: To authorize the Director to attend this convention as a representative of the Station.

The question of sending a second delegate was discussed, and it was

VOTED: That the Director be authorized to arrange for a second delegate, providing one could be found to attend in consideration of a sum not to exceed $25. from the Experiment Station.

The Director called attention to the convention of Agricultural Chemists to be held in Denver, Colorado, August 26th to 28th, and presented Dr. Lindsay's letter relative to sending a delegate.

VOTED: That on account of the large expenditure required to send delegates to the convention in Portland, the Station do not send a delegate to Denver.

The Director stated the nature of the contents of the bulletin on "Bee Keeping in Massachusetts" which is to be published by the courtesy of the U. S. Department of Agriculture. No vote was passed, but the members of the committee expressed their approval of the publication.

The Director gave an account of recent conferences and correspondence relative to experimental work with cranberries in the Cape district. He reported the movement on the part of the committee representing the Cape Cod Cranberry Growers' Association to collect funds to help meet the expenses of such experi-

mental work, and read a letter from the secretary of the legislative committee stating that about $840. had been already promised, and that more would probably be raised. After some discussion, it was

VOTED: That the Director be authorized to engage Dr. H. J. Franklin for experimental work with cranberries and such other work as it may seem best to place in his charge for the period of one year, to begin some time in September, at an annual salary of $1625.00

The Director presented the plans and estimates for additions to and modifications of the chemical laboratory of the experiment station. The plans met with general approval and it was

VOTED: That the committee approve the general plans and estimates presented, and recommend to the trustees that the next Legislature be asked for an appropriation of $20,000. for the purpose of carrying out the plans.

After some further general discussion relative to a number of station matters not followed by any formal action, the committee adjourned.

Wm. P. Brooks,

S. Acting Secretary.

MINUTES OF MEETING OF COMMITTEE ON EXPERIMENT DEPARTMENT.

HOTEL BELLEVUE, BOSTON, JANUARY 5, 1910, at 12.30 P. M.

PRESENT: Messrs. Preston, Pollard, Bowker, Ellsworth, Frost, President Butterfield, and Director Brooks.

The Director presented, as informal matters of information, papers showing the nature of expenditures during the year for the following purposes:

Asparagus substation at Concord
Graves' Orchard at South Amherst
Cranberry experiments with fertilizers at Falmouth
Cranberry insect work at Wareham and vicinity
Cost of Fertilizer Control. (Here Secretary Ellsworth read a letter from W. D. Ross of the firm of Ross Bros. of Worcester, urging that the collection of samples, analyses and publication of results for fertilizers, should be made before the season when sales chiefly take place. The Director stated some of the leading reasons why it would be difficult or almost impossible to do this, and without vote, the letter was placed in his hands for reply).
Department resources, expenditures, and balances. (Sheets 1, 2, 3, 4, hereto appended).

The Director presented a statement of the publications of the year and their cost. (Sheet 5).

The Director reported the employment with the approval of President Butterfield of Mr. Carl D. Kennedy, a graduate of the New Hampshire Agricultural College, as assistant chemist on trial, at a salary of $800. per year, beginning October 15th, Mr. Kennedy having been employed chiefly in research chemical work under the direct oversight of Mr. Holland. It was

VOTED: To ratify this action of the Director and to authorize him to make the employment of Mr. Kennedy permanent.

The Director reported the employment of Mr. J. F. Merrill as assistant chemist to take the place of Mr. P. V. Goldsmith (resigned to accept a better position), at a salary of $900. per year, beginning December 10th, this action having been taken with the approval of the President. It was

VOTED: To ratify this action.

The Director presented an analysis showing estimated expenditures under existing arrangements of the Adams Fund moneys up to July 1st next (Sheet 6) and explained the desirability of an additional chemist to engage in research work, especially in investigations in connection with asparagus, and recommended the employment of Mr. Fred W. Morse, until recently chemist in the New Hampshire Experiment Station, from the period beginning January 18, 1910, to July 1, 1910; Mr. Morse to work for the present at least, four and one-half days each week, and to be paid at the rate of $2000. per year for full time. It was

VOTED: To authorize the employment of Mr. Morse.

The Director next eplained the desirability of an additional assistant in the department of Botany, dependent chiefly upon the necessity that more research work should be done in the department, and recommended the employment of an assistant at a salary of not to exceed $50. per month from July 1st next. It was

VOTED: To authorize the employment of such an assistant.

The Director presented a letter from the secretary of the legislative committee of the Cape Cod Cranberry Growers' Association (Mr. L. B. R. Barker) announcing the passage of a vote by that committee instructing the Treasurer of the Association to

collect the sums pledged by the growers for the support of experimental work, and to turn the amount over to the Treasurer of the Massachusetts Agricultural Experiment Station, to be used for work in cranberry investigation, and stated that the amount coming from this source is likely to be $800. to $1,000. It was moved and

VOTED: That the Director be authorized to accept this money and to use it for the purposes in view.

(For copy of letter, see Sheet 7).

The Director stated reasons why it seems wise to transfer Harry J. Allen, employed in the Chemical Department, to the salary list, and it was

VOTED: To do this.

The Director called attention to the financial resources of the station for the current year (Sheet 8), andthe recommended increases in salaries as shown by Sheet 9 hereto appended. It was

VOTED: That the increases recommended in the cases of Messrs. Howard and Reed, be authorized; but that action on the balance of the recommendations be delayed until the June meeting.

On motion of the Director, it was

VOTED: That all department balances should be cancelled.

The Director presented his recommendations covering the financial apportionment to the departments and for different purposes from December 1, 1909, to December 1, 1910. (Sheet 10). It was

VOTED: To approve this apportionment and the total recommended for salaries as shown on Sheet 9, previously referred to.

The Director explained the nature of the demand for expert services requiring visits for examination of farm lands, and stated that in his judgment persons receiving such services should be given an option of contributing to the treasury of the Experiment Station such sums as they see fit in recognition of the value of such services, and he presented a form of letter to be sent to such persons. It was

VOTED: To authorize the Director to make a trial of this plan.

It was suggested that it might be well to send the letter before the service was rendered rather than after. (Form of letter on Sheet 11).

The Director stated his reasons for believing that experiments with alfalfa should be conducted, the expense to be borne by the agricultural department of the Experiment Station. It was

VOTED: To authorize him to carry out this plan.

The Director presented a tentative form of agreement designed to provide for the conditions under which cranberry growers should contribute to the expense of the experimental work on cranberries, and the conditions under which such work should be carried on. (Sheets 12, 13, 14). It was

VOTED: To authorize the Chairman (Mr. Preston), Secretary Ellsworth, and the Director to execute an agreement along the general lines of the tentative form with any responsible body of cranberry growers.

The Director explained the reasons why it seems advisable to reverse the scheme of numbering the two parts of the annual report of the Experiment Station, and stated that this would not change the nature of either part, nor the use made of them, the

change in question being simply clerical. It was

VOTED: To authorize him to attempt to have this change made, either on the authority of the chairman of the Board of Publications, or by an amendment of the act relative to the publication of the report of the Experiment Station.

The Director explained the desirability of the passage of an act providing for the inspection of apiaries and the control of bee diseases. It was

VOTED: That the Committee recommend to the whole Board that it favor the enactment of such a law, and to authorize the Director to appear before any committee of the Legislature having the matter under consideration.

There was an informal discussion of the question of the desirability of the passage next year of a seed law.

The Director stated his feeling that it would be desirable to make Dr. J. B. Lindsey vice director of the Station, and it was

VOTED: To recommend to the full Board that Dr. Lindsey be made Vice Director of the station without additional salary.

Meeting adjourned.

(Signed) Wm. P. Brooks

Acting Clerk.

ASPARAGUS SUBSTATION EXPENSES.

January 1, 1909 to December 1, 1909.

Labor,	$420.12
Paint,	3.98
Insecticides,	30.00
Telephone,	19.00
Rent,	90.00
Fertilizers,	91.95
Travelling expenses,	24.78
Freight and Express,	.27
Sundries,	18.00
	$698.10

GRAVES' ORCHARD EXPENSES.

January 1, 1909 to December 1, 1909.

Labor,	$ 41.65
Fertilizers,	51.00
Rent,	75.00
Freight,	5.70
Seed for cover crop,	9.00
	$182.35

CRANBERRY FERTILIZER INVESTIGATIONS.

January 1, 1909, to December 1, 1909.

Traveling expenses,	$29.85	
Labor,	63.80	
Fertilizers,	25.51	
Freight,	78.00	
Sundry supplies,	37.60	
4-ft. cylinders,	97.02	
Brass tubing, strainers and pots,	54.60	$386.38

CRANBERRY INSECT INVESTIGATIONS.

January 1, 1909, to December 1, 1909.

Traveling expenses,	$123.19	
Sundries,	2.19	$125.38

Total for cranberry work, ... $511.76

FERTILIZER ACCOUNT.

January 1, 1909, - Jan. 1, 1910.

Chemical Salaries, ...	$2507.03
Chemicals and apparatus, ...	758.90
Collection, Cost of, ...	849.48
Work in Preparing Samples, ...	103.48
Clerical Work, ...	491.93
Cost of Bulletins, ...	726.00
Miscellaneous, (stationery, journals, miscellaneous repairs, sundry supplies, heat, light, telephone, etc.), ...	542.09
Total, ...	$5978.01

Estimate Additional

Distribution (envelopes & clerical help),	$ 60.00
Salary & Clerical (Rebates & Proof), ...	150.00
	$6188.91

Estimated receipts from License Fees.

$ 5500.00

MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION

DEPARTMENT ACCOUNTS.

March 1, 1909 - December 1, 1909.

Dept. or account	Adams	Hatch	State	Totals	Credits	Appro.	Balance Mar.1,'09	Balance Dec.1,'09
Administration	$	$ 122 50	$1419 98	$1542 48	$ 1 86	$ 900 00	$ 650 41	$ 9 79
Agricultural		428 77	3368 25	3797 02	1825 53	1800 00	466 39	294 90
Asparagus	659 97		20 92	680 89		1400 00	- 657 51	61 60
Botanical	360 39	217 01	906 79	1484 19	17 71	1086 76	166 55	- 213 17
Chemical	635 94	462 74	5517 40	6616 08	3810 45	2550 00	264 13	8 50
Cranberry	415 72		96 04	511 76		500 00	842 23	830 47
Entomological	82 50	155 60	204 95	443 05		375 00	416 70	348 65
Freight & Express		21 48	395 19	416 67	8 85	450 00	- 233 62	- 171 44
Graves' Orchard		26 40	179 70	206 10		50 00	270 48	114 38
Horticultural	186 73	389 69	682 59	1259 01		400 00	783 00	- 76 01
Library		13 26	203 21	216 47		225 00	- 28 18	- 19 65
Repairs & Painting			19 40	19 40		300 00	- 177 39	103 21
Meteorology		36 75	235 28	272 03			134 35	- 137 68
Publications		23 00	580 11	603 11		3000 00	- 522 74	1874 15
Salary	6611 45	10214 28	4188 58	21014 31		20975 00	- 753 86	- 793 17
Treasurer's Office			199 62	199 62		260 00	135 80	196 18
Veterinary		56 46	134 30	190 76			295 51	104 75
Licence Fees					5150 00			
TOTALS	$8952 70	$12167 94	$18352 31	$39472 95	$10814 40			

P U B L I C A T I O N S.

January 1, 1909, to January 1, 1910.

BULLETINS.

No.	Title	Pages	Edition	Cost.
128	Inspection of Commercial Feed Stuffs.	56	16,000	$507.00
129	Bee Keeping in Massachusetts.	32	4,000	68.00
130	A Summary of Meteorological Observations	28	4,000	125.00

CIRCULARS.

20	The Use of Lime in Massachusetts Agriculture.	6	2,000	15.90
21.	The Control of Onion Smut.	2	500	3.50
22	Poultry Manures, their Treatment and Use.	4	1,000	7.75
23	A Parasite of the Asparagus Beetle.	2	300	2.75
24	An Act to Provide for the Protection of Dairymen. The Babcock Test.	8	500	12.00
25	Cottonseed Meal.	8	1,500	17.50

OTHER PUBLICATIONS.

Separata.	Seventeen Year Locust.	12	50	6.33
Separata.	Methods of Fat Analysis.	24	100	9.18
Meteorological Reports, 12 mos. at $11.50				138.00
				$ 912.01

dog, especially in the [illegible]

ESTIMATED EXPENDITURES OF ADAMS FUND TO JULY 1, 1910.

Made on the basis of existing arrangements, Dec. 1, 1909.

Adams Fund Balance, Dec. 1, 1909, ...		$3326.68
Adams Fund, Receipts for 6 mos., ...		6500.00
		$9826.68
Salaries, ...	$6163.17	
Asparagus, ...	600.00	
Cranberry, ...	500.00	
Entomology, ...	50.00	
Botany, ...	200.00	
Horticulture, ...	600.00	
Chemistry, ...	600.00	$8713.17
Balance, ...		$1113.51

(COPY)

Plymouth, Mass., Nov. 23rd, 1909.

Professor Wm. P. Brooks,

Amherst, Mass.

Dear Sir:

At a meeting of the Legislative Committee of the Cape Cod Cranberry Growers' Association, held in Boston on the 15th inst., it was unanimously voted that the pledges be collected by the Treasurer of the Association, Mr. Hammond, and that the amount so collected be turned over to the Treasurer of the Massachusetts Agricultural Station to be used for experimental work in the cranberry industry.

Sincerely yours,

(Signed) L. B. R. Barker,

Secretary.

FINANCIAL STATEMENT.

RESOURCES.

Balances December 1, 1909.

Feed Law,	$2148.50	
Adams Fund,	3326.68	
Hatch Fund,	155.79	
State Fund,	1051.71	$6682.68

Prospective Receipts.

Fertilizer Fees, estimate,	$ 5500.00	
Adams Fund,	14000.00	
Hatch Fund,	15000.00	
State Fund,	10500.00	
Feed Law,	3000.00	
Cranberry Growers' Contribution,	800.00	$48800.00

Total Resources, ... $55482.68

Possible Receipts.

Chemical Department,	$4800.
Agricultural Department,	2000.
	$6800.

EXPENDITURES.

Salaries,	$31825.36	
Departments,	12100.00	
Substations,	2400.00	
General,	4300.00	
Assistant in Botanical Dept.,	250.00	$50875.36
Feed Law, estimated expenditures,		2781.83
Total Expenditures,		$53657.19
Morse Est.,		750.00
		$54407.19

SUMMARY.

Total Resources,	$55482.68	
Total Expenditures,	54407.19	
Balance,	$ 1075.49	$1075.49

Existing department balances to be cancelled.

ANNUAL SALARIES RECOMMENDED.

Name.	Amt. per Year.	Amt. and date of Increase.
Brooks,	$3000.	
Brown,	800.	
Chapman,	1100.	$100. after July 1, 1910.
Cobb,	740.	60. " " "
Crocker,	680.	60. " " "
Fernald, C. H.,	600.	
Fernald, H. T.,	1000.	
Franklin,	1600.	
Fulton,	1400.	100. " " "
Gaskill, E. F.,	1100.	100. " " "
Gaskill, Roy F.,	660.	
Goessmann,	1000.	
Green,	200.	
Haskins,	1900.	
Holland,	2000.	100. " " "
Howard,	840.	60. " Mar. 1, "
Kennedy,	800.	
Kenney,	500.	
Lindsey,	2500.	
O'Donnell, Miss,	620.	60. " July 1, "
Ostrander,	500.	
Paige,	500.	
Reed,	1000.	100. " Jan. 1, "
Sears,	250.	
Shaw,	1100.	100. " Oct. 1, "
Stone,	1300.	
Summers,	360.	
Walker,	1100.	100. " July 1, 1910.
Waugh,	400.	
Allen,	780.	60. " " " "
Merrill,	900.	
Smith,	1600.	100. " " " "

DEPARTMENT APPORTIONMENTS.

Departments.			
Administration,		$2000.	
Agricultural,		2500.	plus receipts
Botanical,		1600.	
Chemical,		2800.	" "
Entomological.		800.	
Horticultural.		1450.	
Veterinary,		250.	
Meteorological,		300.	
Treasurer's Office,		400.	$12100.00
Substations.			
Asparagus,		700.	
Cranberry,		1000.	
Graves' Orchard,		300.	
Tobacco coop. experiments,		400.	$2400.00
General.			
Publications,		3000.	
Library,		300.	
Freight and Express,		500.	
Binding publications,		200.	
Calculating machine for Horticultural Dept.,		300.	$4300.00
Assistant in Botanical Dept. after July 1st, at $50. per month,		250.00	$19050.00
Total,		$19050.00	

Amherst, Mass., _____

Dear _____:

No charge is made for the expert services of _____. We would, however, remind you that he is a member of the staff of a government institution, paid by the public and expected to work in the service of the public. His service to you was primarily for your individual benefit. It can effect or interest the general public only remotely, if at all.

The funds available for the work of the _____ are inadequate for its fullest usefulness. Should you, therefore, feel disposed, as some recognition of the services you have received, to make a contribution, however modest to the treasury of the institution, it will be gratefully received and used in accordance with our best judgment in the public interest.

All payments, whether to cover travelling expenses, or in recognition of services, should be made to the Treasurer, Mr. Fred C. Kenney, Amherst, Mass.

AGREEMENT

between the

MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION

and the

CAPE COD CRANBERRY GROWERS' ASSOCIATION.

It is hereby mutually understood and agreed between William P. Brooks, Director, representing the Massachusetts Agricultural Experiment Station of the Massachusetts Agricultural College, and F. F. Marsh, I. C. Hammond, Z. H. Jenkins, E. A. Stevens, L. B. R. Barker, the Legislative Committee representing the Cape Cod Cranberry Growers' Association, as follows:

1. That the Massachusetts Agricultural Experiment Station, having been assured of a measure of financial support for the purpose from Cranberry Growers through oral and written assurances received from the above named Committee and some of its members. will undertake to prosecute Experimental and Research work in the interests of the Cranberry Industry in the Cranberry district.
2. It is understood that said Station will place Doctor H. J. Franklin in local charge of such Experimental and Research work, and that without excluding other lines of experiment and research the principal lines of work at first will be directed toward the solution of insect and fertilizer problems.

3. It is understood that while suggestions from the above named Legislative Committee will always be welcomed the final decision as to what experiments or researches shall be undertaken and full responsibility therefor will rest with the said Director with the approval of the Committee on the Experiment Station of the Board of Trustees of the Massachusetts Agricultural College.

4. It is understood that in consideration of the undertaking of such Experimental and Research work under the conditions set forth in clauses one, two and three of this agreement the said Legislative Committee will promptly place at the disposal of said Experiment Station such sums of money as are realized and collected by it in response to a circular letter sent to Cranberry Growers in June, 1909, (a copy of which is hereto appended) and such other circulars or other appeals for money for the support of Experimental and Research work with cranberries as may hereafter be circulated or published.

5. It is understood that any and all general plans for the use of such funds as are collected by said Legislative Committee and by it placed at the disposal of the said Experiment Station shall be submitted to the said Legislative Committee for discussion and consideration before adoption.

6. It is understood that said Director will render full and itemized reports covering the use of such funds on the first of December and the first of June in each year and at any other time on the request of said Committee; to the members of wnich, moreover, or to its duly constituted representative the books in which the accounts covering the use of such funds are kept shall always be accessible.

Director.

ned in Dup-
ate this
day of
1909

Legislative
Committee.

MEETING OF TRUSTEES COMMITTEE ON EXPERIMENT STATION.

Office of the State Board of Agriculture, Wednesday, May 25, 1910.

PRESENT: Messrs. Preston, Ellsworth, Frost, Ward, Pollard and Director Brooks.

The Director reported the passage of the resolve making an appropriation of $15,000. to be expended at the Massachusetts Agricultural Experiment Station under the direction of the trustees of the Massachusetts Agricultural College in the purchase of real estate and of the necessary equipment, and for the employment of labor in experimental work respecting planting and growing of cranberries.

After some general discussion as to the best means to be taken looking toward the selection both of location and of a suitable property, the following action was taken:

VOTED: That the committee on experiment station hold a hearing in Wareham on Tuesday, June 14, at 11 o'clock A. M. for the purpose of learning the views of cranberry growers in relation to the location of the sub-station for experimental work with cranberries.

VOTED: That the Director be instructed to send official notice to the President of the Cape Cod Cranberry Growers' Association, and to see that early notice of the hearing be inserted in papers published in the cranberry districts of the state.

After some general discussion in relation to the desirability of acquiring additional land immediately adjoining the present station grounds on the north for the use of the experiment station, the meeting, without taking any formal action in relation to the matter, adjourned.

(Signed) Wm. P. Brooks, Acting Secretary.

MINUTES OF MEETING OF COMMITTEE ON EXPERIMENT DEPARTMENT.

Boston, Mass., June 14, 1910.

PRESENT: Messrs. Pollard and Frost, President Butterfield, and Director Brooks.

The Director made a verbal report on the results of the hearing for cranberry growers in Wareham. He stated that there was a small but representative gathering of substantial growers, and that the general sentiments expressed in relation to the location of the station for experimental work with cranberries were reasonable and friendly. He reported the passage of the following resolve:

> RESOLVED: That the cranberry growers assembled hereby express their gratitude to the Massachusetts Legislature for the appropriation which makes the establishment of an experimental cranberry station possible, and shall be satisfied with any location of the station that in the judgment of the committee on experiment station of the Trustees of the Massachusetts Agricultural College may be best; but they hope the location may be somewhere in the district between Buzzard's Bay and Middleboro, and within reasonable distance of railway station or trolley line.

The Director reported further that it had been decided to advertise for descriptions of suitable properties and the prices at which such properties would be sold, all offers in order to be considered to be received on or before July 1st.

The reading of the reports of the heads of departments was waived with the understanding that written copies would be sent to each member of the committee.

The Director recommended the employment of Professor Fred W. Morse as research chemist to study fertility problems at a salary of $2000. per year, and it was

VOTED: To recommend Mr. Morse's employment to the full board of trustees.

The Director announced the resignation of Roy Gaskill who has been in charge of the experiment station barn, to accept a more lucrative position, and recommended the employment in his place of E. Baxter Eastman, Jr. at a salary of $50. per month, and it was

VOTED: To employ Mr. Eastman for this position.

The Director recommended increases in salaries shown on Sheet I, hereto appended, and it was

VOTED: To recommend to the full board of trustees the increases which Sheet I indicated to take effect July 1st and October 1st.

The Director announced the resignation of Mr. J. N. Summers, who has been acting as assistant in the entomological department, and recommended the employment in his place of Mr. Ralph A. Waldron on the same basis as to amount of time devoted to station work, at a salary of $30. per month, for the period July 1st to September 1st, 1910, and it was

VOTED: To authorize his employment.

The Director called attention to the fact that Dr. H. T. Fernald finds himself much worn and somewhat out of health, and stated that Dr. Fernald desired two months' leave of absence, which he recommended, and it was

VOTED: To grant such leave.

Adjourned

William P. Brooks,

Acting Secretary.

ANNUAL SALARIES RECOMMENDED.

Name	Amt. per year	Amt. and date of increase
Brooks	$3500.	
Miss Brown	800.	
Chapman	1100.	$100. after July 1, 1910.
Miss Cobb	740.	60. " July 1, 1910.
Miss Crocker	680.	60. " July 1, 1910.
Fernald, C. H.	600.	
Fernald, H. T.	1000.	
Franklin	1600.	
Fulton	1400.	100. " July 1, 1910.
Eastman	600.	
Gaskill	1100.	100. " July 1, 1910.
Goessmann	1000.	
Green	200.	
Haskins	1900.	
Holland	2000.	100. " July 1, 1910.
Howard	840.	
Kenney	500.	
Kennedy	800.	
Lindsey	2500.	
Miss O'Donnell	620.	60. " July 1, 1910.
Ostrander	500.	
Paige	500.	
Reed	1000.	
Sears	250.	
Shaw	1100.	100. " Oct. 1, 1910.
Stone	1300.	
Summers	360.	Resigns July 1, 1910.
Walker	1100.	100. after July 1, 1910.
Waugh	400.	
Allen	780.	60. " July 1, 1910.
Merrill	900.	
Smith	1600.	100. " July 1, 1910.

MEETING OF THE COMMITTEE ON EXPERIMENT STATION.

Wareham, Mass., July 2, 1910.

Present: Chairman Preston, Mr. Pollard and Director Brooks.

Director Brooks called attention to the fact that advertisements asking for descriptions and proposals for cranberry bogs for experimental purposes had been inserted in the Wareham Courier, Middleboro Gazette and Old Colony Memorial of Plymouth, in accordance with the vote of the committee at the meeting held in Wareham, June 14th. (Copies of said advertisements hereto annexed, Exhibit A).

He stated that as a result of this advertisement only one proposal had been received, i. e. from N. H. Washburn in Lakeville, and that options had been secured on the Marsh and Agawam Farm Company bogs as voted by the committee at the meeting above mentioned. (Copies of said proposal and said options hereto annexed, Exhibits B. C and D).

The committee first considered the proposals for the Lakeville bog, but it was decided that although it would seem to be best to examine the bog, it would be poorly suited for the experiments in view on account of the fact that it was planted with relatively unknown and poor varieties, and does not contain any of the most important of all varieties, the Howe.

The relative advantages and disadvantages of the Marsh and Agawam Company properties were then exhaustively considered. The decision reached by the committee was that the Marsh bog was much inferior to the Agawam Farm Company bog, especially in the following particulars:

(1) Less even in character of bottom and condition of vines and not therefore offering so good a basis for experiment as the Agawam Farm Company bog.

(2) Varieties apparently impure or mixed.

(3) Water supply, while moderate, possibly uncertain in excessively dry weather, while conditions affecting it are such that there seems considerable possibility that questions difficult of solution relative to the respective rights of different parties will be likely to arise at critical times.

(4) Joint ownership in the screen house proposed seems likely to be unsatisfactory.

(5) Certain reservations as to rights of way and joint use and maintenance of dikes seem undesirable. (For statement of conditions affecting maintenance of reservoir and use of water see copy of agreement between the parties who constructed the reservoir and originally shared the use of the water. Exhibit E).

The various conditions affecting the waters of Spectacle Pond in their possible relations to the supply for the Agawam Farm Company bog were then most thoroughly considered. The Director made a full statement of the results of his investigations in the offices of the Commissioners of Harbor and Land, and Corporations. Briefly stated, these conditions appeared to be as follows:

(1) Spectacle Pond is a great pond and under the jurisdiction of the Commissioners on Harbor and Land. (See Chap. 318 Acts and Resolves of Mass. for 1888, also Chap. 96, Revised Statutes of Mass.)

(2) The Agawam Farm Company takes water to supply its cranberry bog from the pond, raising it by pumping a distance of four or five feet.

(3) Said Agawam Farm Company has obtained no license from the commissioners to use water as above stated; but its property abuts on the pond and it appears to be a common practice under such conditions for property owners to use the water of such ponds without securing a license, provided there is no objection and it does not appear that there has ever been objection to the use of water above referred to by the Agawam Farm Company.

(4) There is in existance a license granted in 1895 to Hannah F. Rogers and others to take water for the irrigation of a cranberry bog shown in the diagram accompanying the petition for a license, the area of which is about 13 acres. Water to supply this bog flows to it through an artificial channel by gravity and is therefore diverted from its natural water shed to another water shed, since it is never returned to the water shed from which it is taken. (For copy of license above referred to see Exhibit F).

It appears further that a protest against the granting of this license was entered as a matter of record by the Tremont Nail Company, through its treasurer, Horace P. Tobey. For this protest see Exhibit G). The commissioners have never taken any action on this protest.

The Director stated his conviction, which appeared to be shared by the members of the committee present, as well as by Dr. Franklin and Mr. John C. Makepeace, who had been consulted, that the draught on the waters of the pond to supply the Rogers bog was of no importance in its effect upon

the supply available for the Agawam Farm Company.

(5) Examination of the records in the office of the Commissioners on Harbor and Land showed that the charter of the Tremont Nail Company granted them no rights in Spectacle Pond.

(6) After examination of indexes to legislation affecting corporations, the member of the Commission on Corporations stated that there had been no special legislation granting rights in Spectacle Pond to said Tremont Nail Company.

(7) The Director stated that investigation and statements of interested parties, especially of Marcus L. Urann, representing the Agawam Reservoir, Power and Irrigation Company, indicated that this company which would appear now to be affiliated with, or which perhaps controls the Tremont Nail Company, claims certain rights in Spectacle Pond, which through the construction many years ago of a ditch or canal connecting it with the Agawam Mill Pond, appears to serve in some measure as a storage reservoir and feeder to the power plant originally controlled by the Tremont Nail Company which was organized under the general law of the Commonwealth in 1859.

(8) The Commissioner on Corporations after examination of the charter of the Tremont Nail Company stated that this charter granted the company no rights in Spectacle Pond.

(9) After consultation of his indexes the Commissioner reported further that there had been no legislation granting rights in Spectacle Pond to said Tremont Nail Company.

(10) Investigation in the office of the Commission on Corporations involving examination of the charter of the Agawam Reservior, Power and Irrigation Company showed that

this charter gave that company no rights in Spectacle Pond.

(11) The Commissioner stated, after examination of his indexes, that there appeared to have been no legislation granting any rights in Spectacle Pond to the Agawam Reservoir, Power and Irrigation Company.

(12) The Director stated that Mr. Marcus L. Urann, above referred to, had stated to him that the rights of the Agawam Reservoir, Power and Irrigation Company in Spectacle Pond by virtue of the connection between it and Agawam Mill Pond above referred to (See 7) would make it possible for that company to take such action as would lower the water in Spectacle Pond some four or five feet, but it was the conclusion of the Director, members of the committee, Dr. Franklin, and Mr. Makepeace that the fact that such rights exist does not appear to be established and further that even if they do exist and should be exercised, there would still be an ample supply of water in Spectacle Pond for the irrigation of the cranberry bog of the Agawam Farm Company. The only difference between the condition which would exist after the exercise of such rights should they be found to exist and that at present existing is that it would be necessary to raise the water a somewhat greater distance in order to turn it on to the bog.

The members of the committee visited and carefully examined the bog of the Agawam Farm Company and saw the pumping machinery started and in operation. The unanimous conclusion of all was that the bog was thoroughly satisfactory in every way and after careful consideration of all the possibilities which appeared to be connected with the right to use water from Spectacle Pond, it was unanimously

VOTED: To authorize the Director to accept the option on this bog which had been extended until July 12th by a letter from Silas N. Besse, representing the Agawam Farm Company. (Exhibit H) provided further investigation on the part of either Mr. M. F. Dickinson or such lawyer as he might see fit to employ satisfied him that the title which could be conveyed by the Agawam Farm Company is good and provided further that there shall appear to be no undesirable complications not revealed by the examinations already made affecting the supply of water available for use on the bog.

The Director stated that Mr. George H. Chapman, an assistant in the department of botany and vegetable pathology under Dr. Stone, who has been engaged for some time in research work as to the causes of mosaic disease of tobacco and tomatoes, had received an offer from the New Jersey Experiment Station carrying with it a much larger salary than that which Mr. Chapman now receives here, and that unless the station could give Mr. Chapman an increase in salary, his resignation would surely follow. The Director pointed out the great loss to the station which the departure of Mr. Chapman involved, stated that Dr. Stone was exceedingly anxious to retain him and that after full consideration of all the conditions affecting the case with President Butterfield, the latter had authorized him to say that the President waived whatever objections he had had in the past based upon considerations affecting the general policy of administration, as he fully recognized the value of Mr. Chapman's services to the station and the loss which his departure would involve. The Director stated that Mr. Chapman would make a three-years' contract on the basis of $1600 per year, and it was unanimously voted to authorize the Director to make such a contract.

Wm. P. Brooks
Acting Secretary.

Note.

The Director on July 6th consulted with the other members of the committee, J. Lewis Ellsworth, Harold L. Frost, and Charles E. Ward by telephone and each in turn signified his approval of the action above quoted. The Director stated in these consultations that after talking the matter over further

with Mr. Chapman, the latter signified that this arrangement would be acceptable and that he had decided upon making a contract on the following basis:

Salary for the year beginning July 12th, 1910, $1400.
Salary for the second year, $1650.
Salary for the third year, $1750.

This modification of the terms of the contract makes the total salary for the three years the same as that voted by the committee, and Messrs. Preston, Pollard and President Butterfield subsequently signified their approval of this modification.

MEETING OF COMMITTIE ON EXPERIMENT STATION.

Springfield, Mass., Dec. 9, 1910.

PRESENT: Messrs. Preston, Ellsworth, Pollard, Frost, Ward, President Butterfield and Director Brooks.

As a matter of information the Director presented a number of statements and reports herewith appended as follows:

On the work of the asparagus substation (Exhibit A)
Graves' Orchard (Exhibit B)
Cranberry Fertilizer experiments (Exhibit C)
Cranberry insect work (Exhibit D)
Financial standing of cranberry bog (Exhibit E)
Cost of fertilizer control work (Exhibit F)
Publications of the year and cost (Exhibit G)
Amount received as voluntary contributions from cranberry growers (Exhibit I)
Amount received as voluntary contributions for expert services (Exhibit H)
Financial statement, State Appro. for the purchase of cranberry bog, etc., by Legislature of 1910 (Exhibit J)

The Director reported the appointment of the following men with the approval of President Butterfield:

(1) Clement L. Perkins, B.Sc., at an annual salary of $800 in place of Carl D. Kennedy resigned.

(2) James R. Alcock at an annual salary of $600 in place of Mr. Eastman resigned.

(3) Arthur I Bourne, A.B., at an annual salary of $960 in place of Messrs. Summers, Waldron and Professor C. H. Fernald, it being understood that Mr. Bourne will be allowed nine hours per week during term time for graduate work, and it was

VOTED: To ratify these appointments.

The Director presented a financial statement showing balances and estimated receipts and expenditures for the fiscal year December 1, 1910 to December 1, 1911. (Exhibit K).

The Director presented also statement showing salaries paid to the different persons on the salary list at the present time (Exhibit L) and on his recommendation it was

VOTED: To authorize increases in salaries as shown by Exhibit M.

The Director recommended that the portion of their total salaries paid by the station to Dr. G. E. Stone and Dr. H. T. Fernald be changed as follows:

To Dr. Stone $1,000 in place of $1300 as at present,

To Dr. Fernald $800 in place of $1,000 as at present, such changes to take effect September 1, 1911, and it was

VOTED: To recommend these changes to the full board of Trustees.

It was recommended further that of the salary received by Director Brooks, $3,000 be paid by the station and $500 by the college, the change to take effect December 1, 1910, and this change was

VOTED.

The Director presented a statement showing department expenditures and balances and it was understood that all balances whether debit or credit standing against different departments of expenditure should be cancelled. This action was subsequently ratified by written assent of the majority of the members of the committee.

On recommendation of the Director, it was

VOTED: Apportionments to the several departments of expenditure in the station as shown by Exhibit N.

The Director presented for consideration a form of understanding with the Bureau of Plant Industry for cooperative

work in connection with cranberry diseases, and it was

VOTED: To authorize the Director to execute this agreement.

The Director stated that there was under consideration a plan for meteorological work in the interests of cranberry growers in the cranberry districts of the state. He stated that he hoped to reach an understanding as to a basis for cooperation between the U.S. Weather Bureau and the station and it was

VOTED: To authorize the Director to execute such an agreement as should be satisfactory to him.

The Director laid before the committee plans and specifications for a building to serve as a screen house at the station cranberry bog in Wareham and furnish necessary office and laboratory accommodations, and it was

VOTED: That a committee consisting of Messrs. Preston, Brooks and Franklin should be authorized to advertise for bids to make a contract and to supervise the erection of such a building.

Director Brooks explained the desirability of having a small amount of additional upland adjacent to the cranberry bog and it was

VOTED: To authorize the committee above named to purchase such upland.

The Director read a letter from Dr. J. B. Lindsey, setting forth the necessity of providing additional and better accommodation for the research chemical work of the station at an early date. This led to general discussion but no action was taken.

Adjourned.

Wm. P. Brooks.
Acting Secretary.

Subsequent to the meeting the Director reported by letter to each member of the committee that Dr.H.J.Franklin desired leave of absence without salary to date from about the middle of December for three months, stating in the letter that he believed that such absence might be granted without detriment to the cranberry work as Dr . Franklin would be in Amherst the greater part of the time and could attend to any matters connected with the cranberry work which should need attention at any time, and that he recommended that Dr. Franklin be given the leave desired. The majority of the committee by letter signified that they were in favor of granting Dr. Franklin's request, and he has accordingly been notified that his request is granted.

(Exhibit A).

ASPARAGUS SUB-STATION EXPENSES.

December 1, 1909 to December 1, 1910.

Labor . . . . ;	$554.25	
Telephone	16.50	
Traveling expenses	26.06	
Fertilizers	63.78	
Rent	45.00	
Freight and cartage	30.10	$735.69

(Exhibit B)

GRAVES' ORCHARD ACCOUNT.

December 1, 1909 to December 1, 1910.

Disbursements

Labor	$203.71	
Fertilizers	51.00	
Freight and cartage	5.70	
Trees	6.40	
Rent	75.00	
Seed for cover crops	9.00	$350.81

Receipts

68 bbls. apples @ $1.75	$119.00

(Exhibit C)

CRANBERRY INVESTIGATION ACCOUNTS.

December 1, 1909 to December 1, 1910.

Fertilizer Investigations.

Traveling expenses	$ 14.24	
Labor	265.78	
Freight	2.35	
Netting, muslin, etc., . . .	17.34	
Lumber and cement	25.76	
Carpentering and materials . .	63.24	
Fertilizers	10.42	$399.13

(Exhibit D)

Insect Investigations.

Disbursements

Traveling expenses	$231.52	
Sundries	100.28	
Sawing and lumber	9.85	
Copies of deeds, etc.,. . . .	8.80	
Photographs	4.50	
Scoops	14.00	
Labor	515.02	
Tax on bog	105.20	$989.17
Bills payable December 1, 1910		511.34

Receipts

1 carload cranberries	$1105.00	
130 bbls. "	650.00	
Miscellaneous	14.04	$1769.04
Balance of 1910 crops sold December 1, ...		480.00
Total disbursements including bills payable Dec. 1,		$1899.64
Total receipts, including balance of 1910 crops . .		2249.04

(Exhibit E)

CRANBERRY BOG ACCOUNT.

Receipts

22 barrels @ 42¢	$ 9.24	
Tax on Agawam Farm Company's portion of bog	4.80	
447½ bbls. cranberries	2238.50	$2242.54

Disbursements

Weeding	$ 9.56	
Pumping	12.75	
Rent of screen house	50.00	
500 bbls. @ 42¢	210.00	
Running cranberry separator	22.00	
Tending " "	14.00	
Carting boxes and berries between bog and screen house	35.86	
Cleaning ditches	2.00	
Raking vines after picking	27.53	
Carting berries from screen house to car	13.38	
Mowing and piling brush around bog . .	78.10	
Coopering barrels, mending boxes and tending screens.	30.22	
Picking berries	276.12	
Screening berries	55.73	
Gasolene for pumping	28.80	
Wheelbarrow, 2 shovels and an ax . .	6.75	$ 842.80
Balance in favor of the bog		1399.74

Estimated expenses previous to ripening of next crop including weeding, picking and all ordinary care . . . . . $ 150.00

(Exhibit F).

Fertilizer Account.

Dec. 1, 1909 to Dec. 1, 1910.

Chemical Salaries	$2794.37
Chemical and apparatus	728.87
Collection, cost of	782.32
Janitor work (preparing samples, etc.) . .	54.75
Clerical work	519.03
Cost of bulletin	748.50
Cost of bulletin envelopes and mailing . .	65.00
Misc. (stationery, journals, misc. repairs, sundry supplies, heat, light, telephone, etc.)	278.09
	$5970.93

(Exhibit G)

P U B L I C A T I O N S.

December 1,1909 to December 1,1910.

BULLETINS

No.	Title	Pages.	Edition.	Cost.
131	Inspeciton of Commercial Fertilizers.	88	18,000	$ 726.00
132	Inspection of Commercial Feed Stuffs.	64	16,500	616.00
133	Green Crops for summer soiling.	20	20,000	190.00
134	The Hay Crops.	68	20,000	467.00
CIRCULARS				
26	Fertilizers for Potatoes.	4	1,000	6.75
27	Seeding Mowings.	8	1,000	16.50
28	Rules relative to Testing Dairy Cows.	6	300	11.50
29	The Chemical Analysis of Soils.	4	1,000	5.25
OTHER PUBLICATIONS				
Separata.	Report of Entomologist.	4	50	1.47
	Fumigation Dosage.	36	50	8.78
	Insects of the Year.	8	50	3.04
	Report of the Botanists.	44	500	16.64
	Ben Davis Group.	20	50	5.46
	Variation in Apples.	32	50	7.57
Meteorological bulletins 12 mos. @ $11.50		4	450	138.00
Corn Show Circulars.		4	2,000	6.00
Circulars purchased from Better Farming Special for station use.				87.49
				$2313.45

(Exhibit H)

EXPERT SERVICES ACCOUNT.

Receipts

T. B. Purves, Jr.,	$15.00	
Albert Marsh	10.00	
Geo. A. Andrus	10.00	
Wm. H. Dixon	25.00	
M. Chamberlain	25.00	$85.00

Disbursements.

Traveling expenses	$12.40	$12.40
Balance		$72.60

(Exhibit I)

CAPE COD CRANBERRY GROWERS' CONTRIBUTION.

December 1, 1909 to December 1, 1910.

Receipts		$728.87
Disbursements		
Salary of Franklin, 3 mos. @ $133.33	$400.00	
Traveling expenses and sundries	71.47	$471.47
Balance		$257.40

(Exhibit J)

SPECIAL CRANBERRY RESOLVE EXPERIMENT ACCOUNT.

1910.

Special appropriation		$15000.00
Traveling expenses	$ 12.12	
Cranberry bog and property	12600.00	
Lawyer's services	136.25	
Advertisements for bogs	14.94	
Options on bog	10.00	
Survey of bog	26.00	$12799.31
Balance		$ 2200.69

(Exhibit K)

FINANCIAL STATEMENT.

RESOURCES

Balances December 1, 1910, (Treasurer's)

Feed Law	$1567.89	
Adams Fund	2903.85	
Hatch Fund	330.66	
State Fund	997.54	
C.C. Cranberry Growers' Contri...	257.40	$ 6057.34

Prospective Receipts.

Graves' Orchard Crop	$ 200.00	
Cranberry bog, net returns	2000.00	
Fertilizer Fees, (estimates)	6000.00	
Adams Fund	15000.00	
Hatch Fund	15000.00	
State Fund	10500.00	
Feed Law	3000.00	
Sale of tobacco, refund from payments to Hubbard & Graves	245.45	
Teaching	150.00	$52095.45
		$58152.79

Probable Receipts.

Chemical Department	$6000.00	
Agricultural Department	2500.00	
Cranberry Legislative Appro. Bal	2200.69	

EXPENDITURES.

Salaries for fiscal year	$36136.19	
Departments	11050.00	
Substations	2000.00	
General	4035.00	
Feed Law, estimated expenditures	3000.00	$56221.19

S U M M A R Y.

Total Resources	$58152.79
Total Expenditures	56221.19
Balance	$ 1931.60

(Exhibit L)

PRESENT ANNUAL SALARIES. 1910.

Alcock	$600
Allen	780
Anderson	360
Bourne	960
Brooks, Sumner	600
Brooks, W. P	3500
Brown, Rose J	800
Chapman	1400
Cobb, Harriet	740
Crocker, Jessie V	680
Fernald,	1000
Franklin	1600
Fulton	1400
Gaskill	1100
Gates	400
Green	200
Haskins	1900
Holland	2000
Howard, Alice M	600
Howard, James T	840
Kenney	500
Lindsey	2500
Merrill	900
Morse	2000
O'Donnell, Bridie E	620
Ostrander	500
Paige	500
Perkins	800
Reed	1000
Sears	250
Shaw	1100
Smith	1600
Stone	1300
Walker	1100
Waugh	400
	$36530.

(Exhibit M)

S A L A R Y C H A N G E S.

Name	Present Rate	New Rate.	Amount.	Rate of Increase.
Brooks, S.C.,	$ 600	$800	$200	Jan. 1, 1911.
Gaskill, E. F.	1100	1200	100	July 1, 1911.
Haskins, H. D.	1900	2000	100	" " "
Reed, J. C.	1000	1100	100	Jan. 1, 1911.
Smith, P. H.	1600	1700	100	July 1, 1911.
Franklin, H. J.	1600	1700	100	Jan. 1, 1911.
Shaw, J. K.	1100	1200	100	Oct. 1, 1911.
Chapman, G. H.	1400	1650	250	July 12,1911.
Walker, L. S.	1100	1200	100	July 1, 1911.

				Decrease Date.
Stone, G. E.	$1300	$1000	$300	*Sept. 1, 1911.
Fernald, H. T.	1000	800	200	*Sept. 1, 1911.
Brooks, W. P.	3500	3000	500	Dec. 1, 1910.

* Probable date.

(Exhibit M)

S A L A R Y C H A N G E S.

Name	Present Rate	New Rate.	Amount.	Rate of Increase.
Brooks, S.C.,	$ 600	$800	$200	Jan. 1, 1911.
Gaskill, E. F.	1100	1200	100	July 1, 1911.
Haskins, H. D.	1900	2000	100	" " "
Reed, J. C.	1000	1100	100	Jan. 1, 1911.
Smith, P. H.	1600	1700	100	July 1, 1911.
Franklin, H. J.	1600	1700	100	Jan. 1, 1911.
Shaw, J. K.	1100	1200	100	Oct. 1, 1911.
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				Decrease Date.
Stone, G. E.	$1300	$1000	$300	*Sept. 1, 1911.
Fernald, H. T.	1000	800	200	*Sept. 1, 1911.
Brooks, W. P.	3500	3000	500	Dec. 1, 1910.

* Probable date.

MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION

DEPARTMENT ACCOUNTS.

December 1, 1909 to December 1, 1910.

Dept. or account.	State.	Hatch	Adams	Totals	Appro.	Credits.	Bal. Dec. 1, '10.
Administration-----	$1485.29	$ 201.25	$ -------	$ 1686.54	$ 2000.	$ 32.85	$ 346.31
Agriculture--- ----	4717.48	624.65	-------	5342.13	2500.	2804.36	-37.77
Asparagus----------	77.31	------	658.38	735.69	700.	-------	-35.69
Botany---- --------	1067.60	53.27	209.26	1330.13	1600.	29.00	298.87
Chemistry----------	8265.83	109.10	948.89	9323.82	2800.	6396.64	-127.18
Cranberry----------	999.59	------	388.71	1388.30	1000.	1769.04	1380.84
Entomology---------	438.38	3.48	114.75	556.61	800.	.80	244.19
Expert Services----	12.40	------	------	12.40	---	85.00	72.60
Freight & Express--	467.97	------	------	467.97	500.	.85	32.88
Graves' Orchard----	160.85	189.96	------	350.81	300.	119.00	68.19
Horticulture-------	658.18	93.20	750.39	1501.77	1750.*	-------	248.23
Library------------	284.12	7.00	------	291.12	500.o	-------	208.88
Meteorology--------	238.34	39.54	------	277.88	300.	------	22.12
Publications-------	1953.61	23.25	------	1976.86	3000.	------	1023.14
Salary---- --------	6454.82	13348.45	11391.79	31195.06	32075.36	15.52	895.82
Treasurer's Office-	371.76	62.70	------	434.46	400.	-----	-34.46
Tobacco Exper.-----	317.78	-----	------	317.78	400.	-----	82.22
Veterinary---------	237.79	-----	------	237.79	250.	-----	12.21
License Fees-------	-------	-----	------	------	----	5870.00	-----
	$28209.10	$14755.85	$14462.17	$57427.12	$50875.36	$17123.06	4701.40

*Includes $300. appropriated for adding machine.
o " $200. for binding.

(Exhibit N)

DEPARTMENT APPORTIONMENTS,

December 1, 1910 to December 1, 1911.

General Expenses.

DEPARTMENTS		
Administration	$1800.00	
Agriculture	2300.00	receipts
Botany	1500.00	
Chemistry	2400.00	receipts
Entomology	700.00	
Horticulture	1350.00	
Veterinary	250.00	
Meteorology	400.00	
Treasurer's Office	350.00	$11050.00
SUBSTATIONS		
Asparagus	$ 500.00	
Cranberry	1000.00	
Graves' Orchard	300.00	
Tobacco Co-operative Experiments	200.00	$ 2000.00
GENERAL		
Publication & Binding	$3000.00	
Library	300.00	
Freight & Express	450.00	
Calculating Machine, Admin. Office	285.00	$ 4035.00
		$17085.00

MEETING OF THE COMMITTEE ON EXPERIMENT STATION

Boston, Mass., Jan. 5, 1911.

PRESENT: Messrs. Preston, Ellworth, Pollard, Frost, President Butterfield and Director Brooks.

Director Brooks stated that he desired to present for consideration a draft of a revised fertilizer law which he wished to introduce in the Legislature during its coming session. Mr. W. H. Bowker, who at his request had been invited to be present, asked to be heard in the interest of fertilizer manufacturers on certain features of the proposed law. Permission having been granted Mr. Bowker discussed and criticized particularly the following points in the proposed law:

Section 2. The words, "which is untrue in any particular."

Section 5. and all other sections in which they occur the words, "for the use of the station." Also in Section 5 he objected that as written it might by implication be concluded that the results of free analysis of fertilizers were to be published and it was suggested that the words, "of official samples" be inserted after the word "analysis" in the last sentence, in the section.

Section 6. The use of the words, "as duplicate samples" and it was provisionally agreed to strike out these words and to insert the word "intact" after the word "held" in this section. In the same section the inclusion of the words in the first sentence, "whenever the circumstances conveniently permit."

The proposal to require under the law as provided in Section 5 the publication of the cost of equivalent amounts of nitrogen, phosphoric acid and potash was the subject of prolonged

discussion, Mr. Bowker strongly opposing.

There was considerable discussion upon nearly all points raised by Mr. Bowker but no votes were taken.

President Butterfield read two new sections which he stated he would like to have considered. These were as follows:

Section 9. The enforcement of the provisions of this Act shall lie with the Trustees of the Massachusetts Agricultural College and wherever in the Act the words Director of the Massachusetts Agricultural Experiment Station or Director are used, they are to be construed as authorizing this officer to act as the executive officer of the trustees of said college, under their authority and by their direction, in enforcing the provisions of this Act.

Section 10. All fees collected under the provisions of this Act shall be turned over to the Treasurer of the Massachusetts Agricultural College and the amounts received and disbursed shall be kept in a separate account and shall be audited and reported as are all other monies placed in charge of the Trustees of the College.

This would involve changing present Section 9 to Section 11 and Section 10 to 12.

The Meeting adjourned at a little after eleven A.M. to reconvene at one P.M.

Afternoon Session.

PRESENT: Messrs.Preston, Ellsworth, Pollard, Frost, Ward, and Director Brooks.

The Director and Mr. Preston reported having had a conference with the lawyer who had been consulted as to the legal form of the proposed law, and the Director proposed as a

means of accomplishing the objects in view in the proposed Section 10 presented by President Butterfield and also meeting Mr. Bowker's wishes as stated in his objection to the words, "for the use of the Station" in Section 5, and elsewhere, striking out those words wherever they occur and the adoption of a new Section 8 as follows:

Section 8. All fees collected by the Director of the Massachusetts Agricultural Experiment Station under the provisions of this Act shall be turned over by the Director to the Treasurer of the said station, and the amounts received and disbursed shall be kept in a separate account and shall be audited and reported as are other monies placed in charge of the Trustees of the Massachusetts Agricultural College.

The monies collected under this Act shall be used to meet the expenses connected with its execution and should there be a surplus, said surplus shall be used for experiments and research relative to soils, fertilizers and manures.

After discussion it was

VOTED: Not to include the last paragraph of this proposed section.

The Director stated that the lawyer very strongly advised against adopting the proposed new Section 9 on the grounds:

)1) As being entirely unnecessary as the Director being appointed by the Trustees it must be understood without so stating in the Act that he derives his authority from them.

(2) That such a provision would be highly inadvisable as it would undoubtedly greatly increase the difficulties in the execution of the law and for other reasons.

No vote on the adoption of the Proposed Section 9 was taken. After general discussion it was

VOTED: To recommend to the full Board that the Director be authorized to introduce in the Legislature the draft for the fertilizer law hereto appended (Exhibit A).

The Director then presented draft for revised law to take the place of Section 65 to 69 of Chapter 56 of the Revised Laws. This was read and discussed section by section

and it was

VOTED: To recommend to the full Board that the Director be authorized to introduce the Act in the form hereto appended (Exhibit B).

The Director read letters from Horatio Hathaway, Jr. and Senator Lodge in relation to experiments designed to encourage insectivorous birds with a view to suppressing the brown tail and gypsy moths and asking the co-operation of the station in order to secure duty free admission of needed appliances. After discussion it was

VOTED: To authorize the Director to make any arrangements for co-operation satisfactory to him and not involving expenditure of station funds.

The Director referred to the advisability of having a copy of the Revised Statutes in his office library and it was

VOTED: To authorize purchase of copy now Director's personal property, provided he finds after application in the proper quarter therefore that it is impossible to secure a free copy.

After brief discussion with no formal action onone or two other matters the meeting was Adjourned.

Wm. P. Brooks.
Secretary pro-tem.

(Exhibit A)

AN ACT TO REGULATE THE SALE OF COMMERCIAL FERTILIZERS.

Be it enacted, etc., as follows:

Section 1. No commercial fertilizer shall be sold or offered or exposed for sale in this Commonwealth without a plainly printed label accompanying said fertilizer and displayed in the manner hereinafter set forth, which shall truly state the following particulars:

1. The number of pounds of the fertilizer sold or offered or exposed for sale.

2. The name, brand, or trade-mark under which the fertilizer is sold, and in the case of agricultural lime, its particular form.

3. The name and principal address of the manufacturer, importer or other person putting the fertilizer on the market in this Commonwealth.

The minimum percentage of each of the following constitutents which the fertilizer may contain: (a) nitrogen, (b) phosphoric acid soluble in distilled water, (c) available phosphoric acid, (d) total phosphoric acid, (e) potash soluble in distilled water; except that in the case of undissolved bone, untreated phosphate rock, tankage, pulverized natural manures, the ground seeds of plants, and wood ashes, when sold unmixed with other substances, the minimum percentage of total phosphoric acid therein may be stated in place of the percentages of soluble and available phosphoric acid; and except that in the case of agricultural lime the label shall truly state the following: (a)

minimum percentage of total lime, (b) minimum percentage of lime combined as lime carbonate,(c) minimum percentage of lime sulfate in gypsum or land plaster, (d) maximum percentage of magnesia when the amount present exceeds five percent.

5. If any part of the nitrogen contained in the fertilizer is derived from pulverized leather, raw, roasted or steamed; or from untreated hair,wool waste,peat,garbage tankage,or from any inert material or materials from which such part of the nitrogen is derived.

When any fertilizer is sold or offered or exposed for sale in packages, the label shall be affixed in a conspicuous place on the outside thereof. When any fertilizer, other than the product of gas-houses known as gas-house lime, is offered or exposed for sale in bulk the label shall be affixed in a conspicuous place on the bin or other enclosure in which the fertilizer is contained but need not state the number of pounds thereof. And when any fertilizer other than gas-house lime aforesaid is sold in bulk the label shall be affixed in a conspicuous place on the car or other vehicle in which the fertilizer is shipped or delivered and shall state the number of pounds thereof. When any fertilizer is sold in packages furnished by the purchaser the seller shall furnish the labels therefore which shall state the number of pounds of the fertilizer so sold.

Section 2. The provisions of the printed label required by Section 1 of this Act relating to the constituents contained in any fertilizer shall be known and recognized as the guaranteed analysis of such fertilizer, and the available phosphoric acid in basic phosphatic slag in any fertilizer shall be stated

in the label thereof on the basis of the results of an analysis by the Wagner Method, so-called, until such time as the Association of Official Agricultural Chemists of the United States shall adopt a method of analysis for basic phosphatics slag, after which the available phosphoric acid shall be stated on the basis of an analysis by the method of said Association.

Any manufacturer, importer, or other person selling or offering or exposing for sale in this Commonwealth a commercial fertilizer or brand of commercial fertilizer, any constituent part of which is of a smaller percentage than stated to be in the label of said fertilizer, and any manufacturer, importer, or other person selling or offering or exposing for sale in this Commonwealth a fertilizer with a label which is untrue in any particular, shall be deemed to have committed a violation of this Act.

Section 3. No manufacturer, importer or other person shall sell or offer or expose for sale in this Commonwealth any commercial fertilizer until he shall have filed with the Director of the Massachusetts Agricultural Experiment Station a copy certified by him to be a true copy of the label required by Section 1 of this Act, excepting the item as to number of pounds, for each and every brand of fertilizer to be sold or offered or exposed for sale in this Commonwealth and shall have paid to the said Director an annual analysis fee for each and every brand aforesaid as follows: $8.00 for nitrogen; $8.00 for phosphoric acid; and $8.00 for potash contained or stated to be contained in any said brand of fertilizer, and $8.00 for each and every brand of agricultural lime except gas-house lime. The certified copy of the label

of each and every brand of fertilizer to be sold or offered or exposed for sale in this Commonwealth shall be filed with and the proper analysis fee for each and every said brand shall be paid to, the Director of the Massachusetts Agricultural Experiment Station prior to the 1st day of January of the calendar year in which the brand is to be sold or offered or exposed for sale. But should a manufacturer, importer or other person desire in any year to sell or to offer or expose for sale in this Commonwealth any brand of commercial fertilizer in respect of which the requirements of this section as to the filing of a copy of the label thereof and the payment of the analysis fee therefore have not been complied with before the 1st day of January of said year, the said manufacturer, importer or other person may offer or expose for sale and sell the said brand in this Commonwealth upon filing a certified copy as aforesaid of the label thereof and paying the full analysis fee therefore. No agent or other person shall be obliged to file a copy of the label of or pay an analysis fee for any brand of fertilizer for which a certified copy of the label has been filed and the analysis fee has been paid by the manufacturer or importer of said brand.

Any manufacturer, importer, or other person filing with the Director of the Massachusetts Agricultural Experiment Station a false copy of the printed label of any fertilizer or brand of fertilizer shall be deemed to have committed a violation of this Act.

Section 4. When both the certified copy of the label of any brand of fertilizer has been filed and the analysis fee therefore has been paid as provided in Section 3 of this Act

the Director of the Massachusetts Agricultural Experiment Station shall issue or cause to be issued a certificate that the same has been done. And said certificate shall be deemed to authorize the sale in this Commonwealth, in compliance with this Act, of the brand of fertilizer for which the certificate is issued, to and including the 31st day of December of the year for which it is issued.

Section 5. Every commercial fertilizer and brand of commercial fertilizer sold or offered or exposed for sale in this Commonwealth shall be subject to analysis by the Director of the Massachusetts Agricultural Experiment Station or by his duly designated deputy or deputies. And the said Director is hereby authorized and it is made his duty to make or cause to be made in each year one or more analysis of each and every fertilizer and brand of fertilizer sold or offered or exposed for sale in this Commonwealth, and to collect the annual analysis fee provided for in Section 3 of this Act. The said Director, his inspectors and deputies, are further authorized to enter upon any premises in this Commonwealth where any commercial fertilizer is sold or offered or exposed for sale to ascertain if the provisions of this Act are complied with, and to take samples for analysis as provided in this Act. The analysis of all fertilizers shall be made by the methods adopted by the Association of Official Agricultural Chemists of the United States, except that basic phosphatic slag may be analysed by the Wagner method, so-called, until a method of analysis therefore is adopted by said Association. The said Director shall have the right to publish or cause to be published in reports, bulletins, special circulars or otherwise, the results secured

from said analyses, and in connection therewith shall, in each case, state the cost of equivalent amounts of nitrogen, phosphoric acid and potash in unmixed materials when bought for cash on the market at retail. Said reports, bulletins, circulars or other publications shall also contain such additional information in relation to the character, composition, value and use of the fertilizers analyzed as the said Director in his discretion may see fit to include. The said Director may at any time make or cause to be made for any person a free analysis of any commercial fertilizer or brand of commercial fertilizer sold or offered or exposed for sale in this Commonwealth, but he shall not be obliged to make said free analysis or to cause the same to be made unless the samples therefore are taken and submitted in accordance with the rules and regulations which may be prescribed by him. The results of any analysis made in accordance with the provisions of this Act, except a free analysis as aforesaid, shall be sent by the Director to the person named in the printed label of the fertilizer analyzed at least fifteen days before any publication thereof.

Section 6. All samples of commercial fertilizers taken for analysis shall be of not less than substantially one and one-half pounds in weight and every sample shall be taken whenever the circumstances conveniently permit in the presence of the person selling, offering or exposing for sale the fertilizer sampled or of a representative of said person. Broken packages shall not be sampled and whenever feasible all samples shall be taken from at least ten percent of the fertilizer to be sampled, except that in the case of a fertilizer sold or offered or exposed for sale in bulk ten single samples shall be taken from as many different

portions of the lot. All samples taken shall be thoroughly mixed and divided into two nearly equal samples, placed in suitable vessels, and marked and sealed. Both shall be retained by the Director, but one shall be held intact by him for the period of one year at the disposal of the person named in the label of the fertilizer sampled.

Section 7. Any person hindering or obstructing the Director of the Massachusetts Agricultural Experiment Station or any inspector or deputy of the said Director in the discharge of the authority or duty imposed upon him or them by any provision of this Act and any person violating any of the provisions of Sections 1, 2, and 3 of this Act shall be fined not less than Fifty Dollars and not more than Two Hundred Dollars for each offence. It shall be the duty of the said Director to see that the provisions of this Act are complied with, and he may, in his discretion, prosecute or cause to be prosecuted any person violating any provision of this Act. But no complaint based upon an analysis of samples shall be made for any violation if the said samples are taken otherwise than as provided in this Act. And no complaint shall be made for a failure of any fertilizer or brand of fertilizer to meet the guaranteed analysis thereof if the analysis of the said fertilizer made by the Director or by his deputy or deputies shows the amounts of the constituents thereof to be substantially equivalent to the percentages stated in the label of said fertilizer.

Section 8. All fees collected by the Director of the Massachusetts Agricultural Experiment Station under the provisions of this Act shall be turned over by the said Director to the Treasurer of the said Station, and the amounts received and disbursed

shall be kept in a separate account and shall be audited and reported as are other monies placed in charge of the Trustees of the Massachusetts Agricultural College.

Section 9. In this Act, unless the context or subject matter otherwise requires;

"Agricultural Lime" includes all the various forms of lime intended or sold for fertilizing purposes.

"Available phosphoric acid" means the sum of the soluble and reverted phosphoric acid, except that as applied to basic phosphatic slag the term available phosphoric acid shall mean that portion of the phosphoric acid made soluble by the Wagner Method, so-called, until such time as the Association of Official Agricultural Chemists shall adopt a method for basic phosphatic slag, after which it shall mean that portion of the phosphoric acid made soluble by the official method.

"Brand" means any commercial fertilizer distinctive by reason of name, trade-mark or guaranteed analysis or by any method of marking.

"Commercial fertilizer" includes every natural or artificial manure containing nitrogen or phosphoric acid or potash or lime, except the excrements and litter from domestic animals when sold in their natural state; but dried or partially dried manure, pulverized or ground, shall be included as a commercial fertilizer.

"Copy" means certified copy.

"Fertilizer" means "commercial fertilizer".

"Importer" means a person who procures for sale in this Commonwealth, commercial fertilizers made in other states or countries

"Label" means printed label.

"Lime" means calcium oxide (CaO).

"Magnesia" means magnesium oxide (MgO)1.

"Packages" includes sacks and bags and all other receptacles.

"Person" includes a corporation or partnership or two or more persons having joint or common interest.

"Phosphoric acid" means phosphoric anhydrid (P_2O_5).

"Potash" means potassium oxide (K_2O).

Section 10. Sections 11 to 17 inclusive of Chapter 57 of the Revised Laws and Chapter 289 of the Acts of the year nineteen hundred and seven are hereby repealed.

Section 11. This Act shall take effect on the first day of December in the year nineteen hundred and eleven.

(Exhibit B)

AN ACT TO REGULATE THE USE OF UTENSILS FOR TESTING THE COMPOSITION OR VALUE OF MILK AND CREAM.

Be it enacted, etc., as follows:

Section 1. No bottle, pipette or other measuring glass or utensil shall be used in this Commonwealth by any inspector of milk or cream or by any person in any milk inspection laboratory in determining, by the Babcock or other centrifugal machine, the composition of milk or cream for the purposes of official inspection; or by any person in any milk depot, creamery, cheese factory, condensed milk factory, or other place in determining, by the Babcock or other centrifugal machine, the composition and value of milk or cream as a basis for payment in buying or selling, until it has been tested for accuracy and verified by the Director of the Massachusetts Agricultural Experiment Station or by his duly designated deputy or deputies. Every such measuring glass or utensil shall be submitted to the said Director by the owner or user thereof, to be tested for accuracy before the same is used in this Commonwealth for the purposes aforesaid. And the said owner or user shall pay to the said Director for the use of the said Station as a fee for making said test, a sum not exceeding five cents for each and every measuring glass or utensil tested.

Any bottle, pipette or other measuring glass or utensil that has been tested and verified as aforesaid shall be marked by the Director or by his said deputy or deputies to indicate the fact, or if tested and found to be inaccurate may be marked by him or them to indicate that it is inaccurate. And no measuring glass or utensil that has been marked by the said Director or by

his duly designated deputy or deputies to indicate that the said glass or utensil is inaccurate shall be used in this Commonwealth by any person in determining the composition or value of milk or cream.

Section 2. Every Babcock or other centrifugal machine used in this Commonwealth by any inspector of milk or cream or by any person in any milk inspection laboratory in determining the composition of milk or cream for purposes of inspection, or by any person in any milk depot, creamery, cheese factory, condensed milk factory or other place for determining the composition or value of milk or cream as a basis for payment in buying or selling, shall be subject to inspection at least once in each year by the Director of the Massachusetts Agricultural Experiment Station or by an inspector or deputy of the said Director. And the owner or user of any such centrifugal machine shall pay to the said Director for the use of said station as a fee for making said annual inspection the actual cost of such inspection for each and every machine inspected.

Any Babcock or other centrifugal machine used as aforesaid that is not, in the opinion of the Director or of an inspector or deputy of the said Director, in condition to give accurate results may be condemned by the said Director or by his said inspector or deputy. And no Babcock or other centrifugal machine that has been condemned by said Director or by an inspector or deputy of the said Director as not in condition to give accurate results shall be used in this Commonwealth by any person for determining the composition or value of milk or cream as aforesaid unless the said machine be changed to the satisfaction of the said

Director, his inspector or deputy and approved by him.

Section 3. No inspector of milk or cream and no person in any milk inspecting laboratory shall manipulate the Babcock or other centrifigal machine for determining the composition of milk or cream for purposes of inspection; or no person in any milk depot, creamery, cheese factory, condensed milk factory, or other place in this Commonwealth shall manipulate the Babcock or other centrifugal machine for determining the value of milk or cream as a basis for payment in buying or selling, without first obtaining a certificate from the Director of the Massachusetts Agricultural Experiment Station or his duly designated deputy that he is competent to perform such work. The fee for such certificate shall be Two Dollars ($2.00) and shall be paid by the applicant therefore to the said Director for the use of the said station. And in case any holder of a certificate is notified by the Director or his duly designated deputy to correct his use of a Babcock or other centrifugal machine, the actual cost of making an inspection to ascertain if the said person has corrected his use of the said machine shall be paid by the said person or by the employer of said person to the Director for the use of the said Station.

No holder of a certificate whose authority to manipulate a Babcock or other centrifugal machine has been revoked by the Director of the Massachusetts Agricultural Experiment Station or by his duly designated deputy shall thereafter manipulate in this Commonwealth any centrifugal machine for the purposes aforesaid.

Section 4. The Director of the Massachusetts Agricultural Experiment Station or his duly designated deputy are hereby authorized to issue certificates of competency to such persons de-

siring to manipulate the Babcock or other centrifugal machine as in the opinion of the Director or his said deputy are competent to manipulate said machines. And the said Director or his deputy may make and enforce rules governing applications for such certificates and the granting thereof and may, in his discretion, revoke the authority of any holder of a certificate who in the opinion of an inspector of the said Director is not correctly manipulating any centrifugal machine as aforesaid or is using dirty or otherwise unsatisfactory glassware or utensils.

Section 5. It shall be the duty of the Director of the Massachusetts Agricultural Experiment Station and he is hereby authorized, to test or cause to be tested all bottles, pipettes and other measuring glasses submitted to him as provided in Section 1 of this Act; to inspect or cause to be inspected at least once each year every Babcock or other centrifugal machine used in this Commonwealth by an inspector of milk or cream or by any person in any milk inspecting laboratory for purposes of inspection; or by any person in any milk depot, creamery, cheese factory, condensed milk factory or other place for determining the composition or value of milk or cream as a basis for payment in buying or selling, and to collect or cause to be collected for the use of said Station the fees or actual cost of tests and inspections provided for in this Act. The said Director, his inspectors and deputies are further authorized to enter upon any premises in this Commonwealth where any centrifugal machine is used as aforesaid to inspect the same and to ascertain if the provisions of this Act are complied with.

Section 6. Any person hindering or obstructing the Director of the Massachusetts Agricultural Experiment Station or any inspector or deputy of the said Director in the discharge of the authority or duty imposed upon him or them by any provision of this Act and any person violating any of the provisions of Sections 1, 2 and 3 of this Act shall be fined not less than Fifteen Dollars and not more than Fifty Dollars for each offense.

Section 7. It shall be the duty of the Director of the Massachusetts Agricultural Experiment Station to see that the provisions of this Act are complied with and he may in his discretion prosecute or cause to be prosecuted any person violating any of the provisions of this Act. But this Act shall not be construed to affect any persons using any centrifugal or other machine or test in determining the composition of milk or cream when such determination is made for the information of said persons only and not for purposes of inspection or as a basis for payment in buying or selling.

Section 8. A sum not exceeding Five Hundred Dollars yearly shall be allowed and paid out of the Treasury of the Commonwealth to meet the cost of prosecutions under this Act to be paid upon the presentation to the Treasurer of the CCommonwealth by the Director of the Massachusetts Agricultural Experiment Station of proper vouchers therefore.

Section 9. The word "person" as used in this Act includes a corporation or partnership of two or more persons having joint or common interest.

Section 10. Sections 65 to 69 inclusive of Chapter 56 of the Revised Laws, and Chapter 425 of the Acts of the year nineteen hundred and nine are hereby repealed.

Section 11. This Act shall take effect on the first day of July in the year nineteen hundred and eleven.

MEETING OF THE COMMITTEE ON EXPERIMENT STATION

Amherst, Mass., June 19, 1911.

PRESENT: Messrs. Preston, Ellsworth, Frost, Ward, Pollard, President Butterfield and Director Brooks.

The Director first submitted as matters of information and in explanation of certain phases of the financial situation the papers numbered respectively, 1, 2, 3 and 4 hereto appended.

1. Department accounts.
2. Department of Plant and Animal Chemistry finances.
3. Shortages in receipts as compared with estimates. Savings and probable excess over estimates.
4. Salary changes as compared with estimates.
   (a) Savings, approximate
   (b) Increases recommended.

After some explanation and general discussion it was moved and

VOTED: That D. W. Anderson receive an increase in salary at the rate of $60 per year to take effect July 1, 1911.

It was

VOTED: That Miss Alice Howard receive an increase in salary at the rate of $100 per year to take effect July 1,1911.

It was

VOTED: That Clement L. Perkins receive an increase in salary at the rate of $100 per year to take effect September 1,1911.

It was

VOTED: To authorize the employment of a new man at a salary of from $60 to $65 per month in place of James R. Alcock in the experiment station barn.

It was

VOTED: To recommend to the full Board of Trustees the employment of H. J. Baker as secretary to the director at the rate of $840 per year on the basis of a division of time between the department of agronomy of the college and the experiment station, the apportionment of salary respectively to college and station to be left to the decision of the president and director.

It was

VOTED: To recommend to the full Board of Trustees the employment of R. W. Ruprecht as assistant in the department of plant and animal chemistry at a salary of $800 per year to begin July 1, 1911.

It was

VOTED: To authorize the employment of Mrs. Lucia G. Church as stenographer and clerk in the Director's office in place of Miss Rose Brown, resigned, at a salary of $800 per year, the change to take effect July 1, 1911.

It was

VOTED: To authorize the sale of the cranberry crop in the station bog through the New England Cranberry Sales Company, it being understood that the ownership of stock required by the said company to entitle to the privilege of sale in accordance with the conditions of their by-laws, be vested in H. J. Franklin, in local charge of the sub-station for cranberry experiments.

The Director then announced the making of a new agreement as a basis for the work on the fertilizer plots in the asparagus experiments in Concord, copy of which is hereto appended. The Director stated that under this agreement there would undoubtedly be some saving in the cost of this work.

Adjourned.

Wm. P. Brooks,

Clerk pro tem.

MASSACHUSETTS AGRICULTURAL EXPERIMENT STATION

DEPARTMENT ACCOUNTS.

Dec. 1, 1910 to June 1, 1911.

Dept.or account.	Hatch.	Adams.	State.	Totals.	Credits.	Appro.	Balance June 1, 1911.
Administration	$ 36.00	$	$ 999.25	$ 1035.25	$	$ 2085.00	$ 1049.75
Agriculture	363.29	15.00	1762.93	2141.22	1244.35	2300.00	1403.13
Asparagus	----	106.08	4.36	110.44	----	500.00	389.56
Botany	----	81.00	420.27	501.27	14.62	1500.00	1013.35
Chemistry	136.46	480.37	5147.65	5764.48	4000.61	2400.00	636.13
Cranberry	----	54.00	1017.71	1071.71	480.00	1000.00	408.29
Entomology	----	28.42	149.50	177.92	----	700.00	522.08
Freight & Express	----	-----	216.60	216.60	----	450.00	233.40
Graves' Orchard	25.33	-----	46.97	72.30	----	300.00	227.70
Horticulture	5.01	209.33	180.11	394.45	----	1350.00	955.55
Library	----	-----	72.83	72.83	----	300.00	227.17
License Fees	----	-----	-----	--- -	5129.83	-- -	5129.83
Meteorology	18.40	-----	103.75	122.15	----	400.00	277.85
Publication	----	-----	834.59	834.59	----	3000.00	2165.41
Salary	5124.90	7021.65	4388.99	16535.54	----	36136.19	19600.65
Tobacco Expts.	----	-----	340.20	340.20	----	200.00	-140.20
Treasurer's Office	----	----	63.92	63.92	----	350.00	286.08
Veterinary	10.80	----	93.16	103.96	----	250.00	146.04
Totals	$5720.19	$7995.85	$15842.79	$29558.83	$10869.41		

DEPARTMENT OF PLANT AND ANIMAL CHEMISTRY FINANCES.

Apportionment . . . . . $2400.

Cash Balance (round numbers) . . . $73.

Bills receivable (cow testing) - . . 908. $981.00

Unusual expenses incurred:

Apparatus purchases on Adams fund . . $803.

Legal service (Fertilizer and Feed Law Revision) 250. $1053.00

In further explanation:

Expenses under Fertilizer Control heavier than heretofore:

Items:

1. Apparatus and chemicals,.....	$478.10	
2. Printing	18.45	
3. Travelling expenses (collection of samples)...	624.90	
4. Gas.....	43.12	
5. Stationery.....	50.95	
6. Miscellaneous.....	51.30	$1266.82

SHORTAGES IN RECEIPTS AS COMPARED WITH ESTIMATES.

Refund co-operative tobacco experiments,.....$245.45

Apple crop, Graves' Orchard..... 200.00

Feed Law will overrun the $3000 appropriation.... ?

SAVINGS AND PROBABLE EXCESS OVER ESTIMATES IN THE FOLLOWING ITEMS:

Salary (net saving).....$800.00

Fertilizer fees will exceed estimates..... ?

Estimated balance December 1, 1910 was $1931.00

SALARY CHANGES AS COMPARED WITH ESTIMATED SUBMITTED AT DECEMBER MEETING.

Savings (Approximate)

Franklin, (leave without salary).....	$460.
Fulton, Apr. 1 to July 1 (resigned).....	350.
Private secretary as compared with Fulton.....	418.
Miss Cobb and Miss Felton, difference.....	20. $1248.

Increases recommended.

Miss Alice M. Howard 5 mos. @ $100 per yr.....	$ 42.
Additional assistant (Fert. Div.).....	333.
Anderson, 5 mos. @ $5 per month.....	25.
Perkins, 3 mos. @ $100 per year.....	25. $ 425.

C O P Y

A G R E E M E N T.

It is hereby mutually understood and agreed between Charles W. Prescott of Concord, Massachusetts, and William P. Brooks, Director, representing the Massachusetts Agricultural Experiment Station, located at Amherst, Massachusetts, as follows: to wit:--

Said Charles W. Prescott agrees:

(1) To rent to the Massachusetts Agricultural Experiment Station for such term of years as may be necessary to carry out the experiments in progress, the land now used in the fertilizer experiments which are being conducted by the said station, at fifteen dollars per acre, per annum.

(2) That he will assume local oversight under the general direction of the said William P. Brooks of the details of the said fertilizer experiments.

(3) That he will give as much of his personal time to the general supervision and execution of the work connected with these experiments as may be necessary in consideration of payment for time of actual service at the rate of fifty cents per hour.

(4) That at his own expense he will do all the work proper to and usual in the care of asparagus among the best growers, except as hereinafter specified.

Said William P. Brooks, Director, representing the Massachusetts Agricultural Experiment Station, on his part agrees that the experiment station will:

(1) Pay rent for the land needed in the experiments at the figure above named, fifteen dollars per acre, per annum.

(2) Pay to Charles W. Prescott for all time actually spent in carrying out the experiments and work connected therewith at the rate of fifty cents per hour.

(3) Pay the cost of such manures and fertilizers as are needed to carry out the experiments.

(4) Pay the cost of extra labor involved in carrying out the experiments as compared with the ordinary expenditure in caring for a commercial crop, the chief items of such expenditure being:

(a) Cost of weighing and applying the manures and fertilizers.

(b) Cost of cutting and weighing the crop.

(c) Cost of taking samples either of soil, manure, fertilizers or crop.

(5) The said William P. Brooks, Director, representing the Massachusetts Agricultural Experiment Station, agrees further that such crops as may be produced, after being harvested and weighed, are to be the property of said Charles W. Prescott, except in so far as they may be needed for the purposes of the experiment.

Signed in duplicate the first day of July, 1911.

Rose J. Brown
Witness.

Wm. P. Brooks
Director, Mass. Agr. Expt. Station.

Alicia M. Keyes.
Witness.

Charles W. Prescott.

Amherst, Mass.

---- LIST OF COMMITTEE MEETINGS. ----

Trustees Committee on EXPERIMENT DEPARTMENT.

Date	Place	Notices sent	Minutes	Remarks
5 Dec. 3,	Springfield		O. K.	
7 April 3,	Amherst		O. K.	
June 6,	State House		O. K.	
Oct. 1,	Amherst House		O. K.	
Dec. 18,	Boston		O. K.	
8 March 26,	Amherst House	March 16,	O. K.	
June 24,	Concord		O. K.	
9 Jan. 7,	State House Boston	Dec. 29, 1908	O. K.	
March 12	Director's office, Amherst	March 8, 1909	O. K.	
June 18,	State House,	June 14,	O. K.	
10 Jan. 19,	Hotel Bellevue	Dec. 29, 1909	O. K.	
May 25,	State House	By Prof. Brooks.	O. K.	
June 14,	Boston,	June 10,	O. K.	
Dec. 9,	Springfield		O. K.	
11. Jan. 5,	State House	Dec. 31, 1910.	O. K.	

MEETING OF THE COMMITTEE ON EXPERIMENT STATION.

Wareham, Mass., September 7, 1911.

PRESENT: Messrs. Preston, Ellsworth, Pollard, President Butterfield, and Director Brooks.

The members of the Committee inspected the plant of the Substation for Cranberry Experiments and the new building for the station work which is substantially completed, and it was

VOTED: That the Director be authorized to accept the building when the work upon it is completed to his satisfaction and to approve bills for payment of the balance due as per contract and special agreements for changes.

Adjourned.

(Signed) WM. P. BROOKS.

Secretary pro tem.

MEETING OF COMMITTEE ON EXPERIMENT STATION.

Boston, January 4, 1912.

PRESENT: Messrs. Preston, Ellsworth, Pollard, Frost, and Ward, President Butterfield, and Director Brooks.

After calling attention to the Treasurer's report on the Experiment Station finances the Director presented for consideration and as matters of information a number of financial statements hereto appended as follows:--

A. Asparagus Substation Experiment.

B. Graves' Orchard Account.

C. Cranberry Investigation Account, Amherst.

D. Cranberry Substation Account, East Wareham.

E. Bog Account, East Wareham.

F. Fertilizer Control Account.

G. List of Publications and Cost.

H. Cape Cod Cranberry Contribution Account.

I. Special Cranberry Resolve Account.

J. Financial Statement showing Cash Balances on Hand, Bills Receivable, and Prospective Receipts.

The Director presented a sheet showing salaries paid at present and making recommendations for increases to become effective July 1 (Exhibit K hereto appended).

The Director presented a statement embodying his recommendations as to apportionments for the current fiscal year to different departments and substations, (Exhibit L hereto appended).

It was

VOTED: That all balances, whether debit or credit, standing against the different departments of the Experiment Station, be cancelled.

It was

VOTED: To recommend to the full Board of Trustees apportionments as recommended.

It was

VOTED: That the apportionment for salaries for the current fiscal year be $37,500.

The Director called attention to the fact that on the basis of existing arrangements there would probably remain an unexpended Adams Fund balance at the end of the Federal Government's fiscal year, and he recommended the employment of an additional assistant or assistants to be employed in research work under the Adams Fund, and it was

VOTED: To recommend to the full Board of Trustees that a Committee consisting of Chairman Preston, Director Brooks, and President Butterfield be appointed with full power to act in this matter.

The Director called attention to the number in the different mailing lists kept by the Station and there was some general discussion as to the policies followed by other Stations in the distribution of their publications, especially in foreign countries and in other States of the United States, and it was

VOTED: To authorize the Director to revise the different out-of-state mailing lists and to distribute publications in accordance with his judgment.

The Director presented a draft of the feed law in the final form in which it has been put after consulting legal authority as to details, and it was

VOTED: To recommend to the full Board of Trustees to ask for an appropriation of $6000 for the execution of the law and to authorize the Director to introduce the law into the Legislature.

The Director referred to the desirability of moving the shed which stands near the pump house at the Cranberry Substation in East Wareham, and he was authorized to move this shed to the vicinity of the screen house whenever in his judgment it shall seem advisable.

Adjourned.

William P. Brooks,

Acting Secretary.

A.

ASPARAGUS SUBSTATION EXPENSES,

December 1, 1910 to December 1, 1911.

Labor	$554 16	
Telephone	16 00	
Traveling expenses	10 44	
Fertilizers	74 03	
Rent	45 00	
Freight and cartage	27 53	
Total,		$727 13

B.

GRAVES' ORCHARD ACCOUNT.

December 1, 1910 to December 1, 1911.

Disbursements:

Labor	$57 63	
Fertilizers	86 33	
Freight and cartage	5 70	
Rent	75 00	
Seed for cover crops	2 08	
Lumber and paper	9 96	
Barrels	21 76	
Sparying material	4 00	
Total,		$262 46

C.

CRANBERRY INVESTIGATION ACCOUNTS

December 1, 1910 to December 1, 1911.

Cranberry Research, Amherst.

Traveling expenses	$ 10 48	
Labor	187 86	
Carpentering and materials	100 66	
Fertilizers	4 43	
Total,		$303 43

D.

CRANBERRY SUBSTATION ACCOUNT, EAST WAREHAM.

December 1, 1910 to December 1, 1911.

RECEIPTS:

Received from sale of cranberries,	$4025 50	
Still due from sale of berries (estimated),	1434 13	
Total receipts from bog,		$5459 63
Received from treasury of United States (on account of weather observations),		109 17
Total receipts,		$5568 80

DISBURSEMENTS:

Expenditures on account of bog:

1. Ordinary running expenses, as per attached statement,	$1597 44	
2. Improvements, as per attached statement,	401 37	
Total bog expense,		$1998 81
Experimental disbursements, as per attached statement,		1639 94
Total disbursements,		$3638 75

BOG ACCOUNT.

December 1, 1910 to December 1, 1911.

DISBURSEMENTS:

1. ORDINARY EXPENSES:

a. Clearing sand away from intake pump,			$ 17 45
b. Lumber,			63 20
c. Oil for engine, etc.(gasolene, kerosene and lubricating),			100 94
d. Tools and similar equipment,			80 58
e. Engine and pump repairs,			11 41
f. Pumping (labor),			26 27
g. Bees,			9 00
h. Barrels,			210 00
i. Shipping crates,			5 88
j. Scoops, purchased and repaired,			10 70
k. Rental of screen house,			50 00
l. Repairing flumes, dykes, etc. (size of item due to wash in spring),			57 48
m. Weeding,			67 47
n. Cutting and piling weeds and brush,			57 16
o. Raking of vines after picking,			36 77
p. Sanding,			22 21
q. Harvesting expenses: --			
1. Picking,	$397 23		
2. Separating,	51 20		
3. Screening,	152 75		
4. Packing,	54 92		
5. Carting (includes taking off from bog, carrying to screen house, and taking to station)	107 06		
			763 16
r. Cleaning up rubbish and incidentals,			5 61
s. Sundries,			1 75
t. Stationery,			40
Total,			$1597 44

2. EXPENSES FOR IMPROVEMENTS:

a. Pump improvement,		161 57
b. Driven pump,		14 00
c. Lumber,		16 08
d. Express and freight,		75
e. General improvements (including cutting and burning of brush, clearing stumps, etc.)		150 74
f. Grading around new screen house,		48 74
g. Whitewashing screening room and cleaning sprayer,		4 33
h. Sundries,		5 16
Total,		401 37

EXPERIMENTAL DISBURSEMENTS.

December 1, 1910 to December 1, 1911.

Insecticides and fungicides,		$ 17 90
Surveying,		23 00
Traveling expenses,		134 49
Office rent,		36 50
Experimental construction:		
a. Lumber, piping, turning device, Myer's pump, concrete, engineers, labor and incidentals,	$419 43	
b. Digging canal,	58 40	
c. Building dykes for experimental flooding areas,	251 19	
d. Excavating for and turfing of experimental flumes,	160 60	
e. Special construction (signboards, etc.)	18 51	
Total,		908 13
Experimental labor,		162 14
Advertising,		4 50
Apparatus,		52 72
Express and freight,		28 98
Stationery,		22 75
Funishings,		167 50
Fertilizers,		8 41
Exhibit,		44 72
Telephone and telegraph,		6 67
Incidentals,		21 53
Total,		$1639 94

FERTILIZER ACCOUNT.

December 1, 1910 to December 1, 1911.

Chemical salaries,	$3591 46	
Chemicals and apparatus,	600 33	
Cost of collection,	612 46	
Janitor work (preparing samples, etc.)	77 21	
Clerical work,	541 00	
Cost of bulletin,	635 00	
Cost of envelopes and mailing,	35 00	
Miscellaneous (stationery, journals, miscellaneous repairs, sundry supplies, heat, light, tel. etc.),	479 04	
Legal service,	200 00	
Total,		$6771 50

RECEIPTS:

License fees,	6094 83

PUBLICATIONS

December 1, 1910 to December 1, 1911.

BULLETINS.

No.	Title	Pages	Edition	Cost
136	Inspection of Commercial Feed Stuffs.	56	18,000	$425.10
137	Rational Use of Lime.	20	22,000	230 00
138	Tomato Diseases.	32	17,000	237 50
139	Inspection of Commercial Feed Stuffs.	32	17,000	275.00

CIRCULARS.

30	Balanced Rations for Dairy Stock.	4	500	3.53
31	Lime and Sulphur Solutions.	4	700	7.50

OTHER PUBLICATIONS.

Separata:	Alfalfa in Massachusetts.	13	500	7.55
	Entomologist's Report.	5	500	5.34
	Botanist's Report.	77	500	34.00
	Climatic Adaptations of Apple Varities.	71	100	24.94
	Peach and Plum Troubles.	18	200	9.38
	Life of Dr. Goessmann.	5	100	5.33
	Composition and Digestibility of Fodder Articles: Composition of Fertilizer Materials, Refuse Substances, Garden Crops, and Soils.	104	500	38.82
Meteorological Bulletins. 12 Nos. @ $11.50,				138 00
	Total,			$1441.99

CAPE COD CRANBERRY GROWERS' CONTRIBUTION.

December 1, 1910 to December 1, 1911.

Balance December 1, 1910,	$257 40
Disbursements:	
Salary of Franklin,	257 40

SPECIAL CRANBERRY RESOLVE EXPERIMENT ACCOUNT.

December 1, 1910 to December 1, 1911.

Balance special appropriation December 1, 1910,		$2200 69
Traveling expenses,	$ 12 00	
Lawyer's services,	11 75	
Surveying,	17 50	
Professional service,	5 50	
Plans and specifications,	30 00	
Building materials and labor,	2123 95	
Total,		$2200 70

FINANCIAL STATEMENT.

RESOURCES.

Balance December 1, 1911. (Treasurer's).

Feed law,	$1676 45	
Adams Fund,	1293 67	
Hatch Fund,	71 03	
State Fund,	1049 81	
Bills Receivable (Cranberries) Est.	1150 00	
		$5240 36

Prospective Receipts:

Graves' Orchard crop (220 bbls.)	400 00	
Fertilizer Fees (estimated)	9000 00	
Cranberry Bog (gross returns)	3000 00	
Adams Fund	15000 00	
Hatch Fund	15000 00	
State Fund	10500 00	
Feed Law	3000 00	
		55900 00
		$61140 36

Probable Appropriated Receipts, Chemical Department, (Cow testing, water analyses, etc.),	$ 7500 00	
Agricultural Department (Sale crops, etc.),	2000 00	

SALARIES.

Name	Present	New Rate	Effective	Fiscal Year.
Alcock, . . .	$ 600	$ 660	July 1	625
Allen, . . .	780	-	-	780
Anderson, . .	420	-	-	420
Baker, . . .	840	960	July 1	890
Bourne, . . .	960	1080	Jan. 1	1070
Brooks, . . .	3000	-	-	3000
Chapman, . . .	1650	1750	July 12	1692
Church, Lucia G.,	800	-	-	800
Crocker, Jessie V.,	680	-	-	680
Felton, F. Ethel,	720	-	-	720
Fernald, . . .	800	-	-	800
Franklin, . . .	1700	1800	Jan. 1	1791 67
Gaskill, . . .	1200	1320	July 1	1250 00
Gates, . . .	440	-	-	440
Green, . . .	200	-	-	200
Haskins, . . .	2000	-	-	2000
Holland, . . .	2000	-	-	2000
Howard, Alice M.	700	720	July 1	708 33
Howard, James T.	840	960	July 1	890
Kenney, . . .	500	-	-	500
Larrabee, . . .	840	960	July 1	890
Lindsey, . . .	2500	-	-	2500
Morse, . . .	2000	-	-	2000
O'Donnell, Bridie E.	620	-	-	620
Ostrander, . .	500	-	-	500
Paige, . . .	500	-	-	500
Pierce, . . .	840	-	Jan. 1	770
Reed, . . .	1100	1200	July 1	1141 67
Ruprecht . . .	800	960	July 1	866 67
Sears, . . .	250	-	-	250
Shaw, . . .	1200	1400	July 1	1283 34
Smith, . . .	1700	1800	July 1	1741 67
Stone, . . .	1000	-	-	1000
Walker, . . .	1200	1320	July 1	1250
Waugh, . . .	400	-	-	400
Assistant Feed Law,	840	-	July 1	350
	$37220			$37320 35

DEPARTMENT APPORTIONMENTS.

December 1, 1911 to December 1, 1912.

DEPARTMENTS:

Administration,	$1800	
Agriculture,	2100	plus receipts.
Botany,	1500	
Chemistry and Fertilizer	2900	plus receipts.
Entomology,	700	
Horticulture,	1350	
Veterinary,	250	
Meteorology,	400	
Treasurer's Office,	350	
Poultry Work,	250	plus receipts.
	$11600	

SUBSTATIONS:

Asparagus,	$ 500	
Cranberry,	3000	
Graves' Orchard,	300	
	3800	

GENERAL:

Publication and Binding,	$2400	
Library,	300	
Freight and Express,	300	
	3000	

EXPENDITURES:

Salaries for the Fiscal Year,	$37500 00	
Departments,	11600 00	
Substations,	3800 00	
General,	3000 00	
Feed Law, exclusive of salaries,	700 00	
	$56600 00	

SUMMARY.

Total Resources,	$61140 36	
Total Expenditures,	56420 35	
Balance,		$4540 36

MEETING OF THE EXPERIMENT STATION COMMITTEE.

Amherst, April 18, 1912.

PRESENT: Messrs. Pollard, Ellsworth, Ward, President Butterfield, and Director Brooks.

In the absence of the chairman Mr. Pollard was elected to act in that capacity.

The Director presented for consideration a Project submitted by J. K. Shaw of the Division of Horticulture for an investigation of the interrelation of stock and scion in apples. The project defined the nature of the investigation, stating its objects, and gave an estimate of costs. The Director called attention to the fact that this project had been submitted to Dr. A. C. True of the Office of Experiment Stations in Washington as a research problem under the Adams Fund and read a letter from Dr. True approving the investigation. The facts were brought out in connection with the discussion that Mr. Preston had examined the project and that it had his approval, and it was

VOTED: To approve the project as a research investigation under the Adams Fund.

The Director stated that in order to carry on the investigation it would be necessary to lease a piece of land, and he presented for consideration a form of lease proposed by the owner (Mary E. Tuxbury) for a field containing between eighteen and nineteen acres lying next north of the station grounds. The members of the Committee (Mr. Preston having previously done so and signified his conclusion that the land is suitable) examined the piece of land, and after a full discussion of the terms of the lease it was

VOTED: That the Director be authorized to execute it as drawn.

VOTED: That the action of the Committee on the Experiment Station in authorizing the execution of this lease be reported to the full Board of Trustees with a request to the Board for determination of policy with respect to contracts of similar nature by the Experiment Station.

After general discussion in relation to Station policy as regards certain publications, the supply of which has been exhausted or nearly exhausted, the meeting adjourned.

William P. Brooks,

Acting Secretary.

NOTE: The papers referred to in the minutes of this meeting, viz. the project for the investigation, the Director's letter to Dr. True, Dr. True's reply, and the lease, will be found in the appropriate files in the Director's office.

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT

Office of the Director of the Station, Friday, September 27, 1912.

PRESENT: Messrs. Preston, Pollard, and Ward, and President Butterfield and Doctor Lindsey.

President Butterfield reported that Doctor Brooks, while gaining in health, would be unable to return to duty at the end of six months' leave of absence, and it was

Dr. Brooks' leave of absence.

VOTED: To recommend to the Trustees that Director Brooks be granted a leave of absence with pay until September 1, 1913.

Doctor Lindsey reported that on account of ill health it was wholly unwise for him to continue to serve as Acting Director. He suggested that Professor Morse be asked to serve in this capacity. It was

Prof. Morse Acting Director of the Experiment Station.

VOTED: To recommend to the Trustees that Professor Morse be asked to serve as Acting Director of the Experiment Station during Doctor Brooks' absence, and that he be granted an additional salary of $50 a month on account of this service, beginning October 1, 1912.

It was

Apportionment of Additional Appropriation.

VOTED: To authorize the apportionment of the additional appropriation from the legislature for investigation, the amount of which is $4500, to take effect December 1, 1912, as follows: --

For poultry investigation, - -	$3750 00
For Veterinary Department, - -	500 00
Unassigned, - - - - - -	250 00

A statement was presented from Professor Graham relative to the necessity of employing a trained biologist and a foreman to carry on the investigation

in poultry husbandry. It was

Employment of biologist and foreman Poultry Department.

VOTED: To leave to the President and the Acting Director, with power, the question of employing a biologist for the Department of Poultry Husbandry, at a salary not to exceed $2200 a year; and a foreman of the Poultry Department of the Experiment Station, at a salary not to exceed $900 per year.

Doctor Lindsey outlined a plan for leasing about four acres of land on the so-called Dillon farm, for the purpose of carrying on some special experiments in commercial fertilizers in cooperation with other Experiment Stations. It was

Rental of Dillon land.

VOTED: To authorize the Acting Director and the Treasurer to lease four acres of land for the use of the Experiment Station, the rental of the land and other expenses for the experiment to be paid out of the commercial fertilizer fund.

President Butterfield presented a statement from Doctor Brooks relative to the lease of a part of his farm to the College for Experiment Station purposes.

A memorandum from Professor Graham was also read outlining the needs of the Department of Poultry Husbandry for more land.

After an inspection of Doctor Brooks' farm, it was

Rental of Brooks farm.

VOTED: To authorize the President to secure from Doctor Brooks a proposition relative to the lease of his farm land for a period not less than ten years nor more than twenty years, with the privilege of purchase at the end of the lease at an appraised valuation to be made at that time.

The Committee adjourned.

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

State House, Boston, November 7, 1912, 9:30 a.m.

PRESENT: Messrs. Preston, Ellsworth, Pollard, President Butterfield, Acting Director Morse; Treasurer Kenney was also present.

Acting Director Morse presented a statement relative to the present and prospective condition of the Experiment Station funds, indicating that the funds now provided are probably insufficient to meet the expenses of the Station during the coming year. It was

VOTED: To authorize the Treasurer to require all Experiment Station bills due the Experiment Station on account of herd testing, to be paid within ten days after date of presentation. Funds

Acting Director Morse made a report of progress relative to the consumation of the lease of the Brooke Farm.

The Committee considered and approved the following projects, to become a part of the legislative budget of 1913, covering improvements and repairs at Experiment Station buildings:

No.69,	Improvements at barn - - - - - -	$335.	(Gen.Imp.)
70,	Repairs to hot house - - - - - -	200.	(Repairs)
71,	Retracking vegetation house - -	80.	(Repairs)
72,	Repairs at farm house - - - - -	350.	(Repairs)
73,	Repairs at Hatch barn, - - - - -	210.	(Repairs)
		(Cut from $$350)	

The Committee considered projects for increase in current appropriation for the Experiment Station and approved the following:

No.57,	Increased maintenance - - - - - -	$ 2500.
60,	Experimental work in floriculture -	1600.
61,	Storage experiments (market gardening)	600.
62,	Investigations in fruit growing, -	3000.
64,	Research assistant in microbiology	2000.
65,	Investigations in veterinary science,	1300.
66,	Agricultural surveys, - - - - - -	4000.
	TOTAL INCREASE APPROVED -	$15000.

With respect to the project presented by Dr.Stone for an assistant in seed work (project No.63), it was

VOTED: To authorize Acting Director Morse to investigate the question of seed control, inspection, separation, and testing, and to report on the same at the next meeting of this Committee; if it seems advisable, he should prepare a bill embodying a suitable seed law to be introduced into the next legislature. Seed Law

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

****

Room 445, State House, Boston, January 2, 1913, at 9:30 a.m.

PRESENT: Messrs. Preston, Ellsworth, Frost, Ward, President Butterfield; Acting Director Morse; Treasurer Kenney was also present.

Acting Director Morse presented and explained the Experiment Station budget for the ensuing year. On recommendation of President Butterfield, it was

C.P.Jones: Salary of

VOTED: To recommend to the Trustees that the salary of Mr. C. P. Jones, assistant chemist in the Experiment Station, be $960 per year, beginning February 1, 1913.

Chemist.

VOTED: To recommend to the Trustees the appointment of an additional assistant chemist for fertilizer inspection at a salary of $840 per year, appointment to take effect March 1, 1913 and to be subject to the approval of the President of the College.

J.S.Sayer: Salary of

VOTED: To authorize the transfer of the salary ($800 per year) of Mr. J. W. Sayer, foreman of the poultry experimental yards, to experiment station accounts, transfer to take effect December 1, 1912.

Annual Budget.

VOTED: To recommend to the Trustees the adoption of the annual budget for 1913 as presented by the Acting Director.

The Acting Director reported on the recent appraisal of the Brooke Farm; after discussion and on motion of Mr. Frost, it was

Lease of Brooke Farm.

VOTED: To reject the proposed plan for the lease of Brooke Farm and to refer the matter to the Board of Trustees for further consideration.

The Acting Director presented a petition from Mr. George H. Chapman for a leave of absence for one year, or a portion thereof, for the purpose of pursuing graduate study

abroad; it was

VOTED: To recommend to the Trustees that Mr. Chapman be granted a leave of absence on the following basis: G.H.Chapman: Leave of Absence.

He to be absent about nine months during the year beginning July 1, 1913, and during his absence to receive a total of $875.

On recommendation of the Acting Director, it was

VOTED: To make application for the establishment of a special weather station at the Experiment Station, which shall be operated in cooperation with the New England section of the U.S.Weather Bureau; it is understood that the additional expense of this project will be small, and that the project shall not be entered upon unless the necessary funds are available. Weather Station.

On motion of Mr. Frost, it was

VOTED: To request the Finance Committee to allow additional payment to those experiment station employees who are called upon for occasional Sunday work in the testing of cattle, it being understood that such additional remuneration shall be provided by the party served. Additional Payment.

The Acting Director presented a draft of a proposed seed law; it was

VOTED: To recommend to the Trustees that the Acting Director be authorized to introduce into the next legislature a bill, substantially as presented by him to the Trustees, providing for the inspection of seeds. Seed Law.

The Acting Director presented a proposal for an amendment to the so-called Fertilizer Law of 1912, for the purpose of strengthening the same, and it was

VOTED: To recommend to the Trustees that the Acting Director be authorized to prepare and submit to the next legislature such an amendment as may be considered necessary by him. Fertilizer Law.

To the Committee on Experiment Station:

I have the honor to submit to you a statement of the finances of the Experiment Station which includes the following items:

Estimated resources for the year extending from December 1, 1912 to November 30, 1913.

Estimated expenditures for the same period.

Classified apportionments for the year.

Reports of the expenditures for the past year as follows:

Asparagus Substation.

Cranberry Substation.

Feed Inspection.

Fertilizer Inspection.

Graves' Orchard Substation.

Special Appropriation for team.

(Financial Statement Appended)

The following matters are deemed worthy of your consideration at this time:

Mr. J. W.Smith, Director of the New England Section of the U. S. Weather Bureau, is ready to recommend the establishment of a special station of the Bureau at the Experiment.Station on our application for the same. The Bureau will pay about $300.00 per year for taking the observations and will furnish such standard instruments as may be needed. It would wish to make use of instruments owned by the Experiment Station, if such are standard,

The Experiment Station would have the same control over its records that it now has, and would be relieved of the expense for students' services and for new instruments as they become necessary.

Favorable action is recommended.

In connection with the herd-testing for advanced registry, it is sometimes advantageous and even necessary to detail someone from the station-staff, usually Mr. Howard, to do the work for a few days. Mr. Smith, who has charge of the work, desires the privilege of allowing pay for any Sunday work so performed, in addition to the regular salary of the employe. The special men engaged for the work, draw pay for every day engaged.

Favorable action is recommended.

In the conduct of the work of the cranberry-substation, it is necessary every month of the working-season, to employ day-labor, and such labor must be paid weekly. Dr. Franklin, in charge, has regularly advanced the money for these payments, and in harvest-time such an advance is heavy. It would be a convenience for Dr. Franklin to draw cash each month, from the Treasurer, on a requisition, sufficient to meet the labor-roll, and such sundry items as need cash payments.

Favorable action is recommended.

Mr. Chapman request. [illegible] to study abroad. Letter of request appended.

Some form of leave recommended.

Dr. Franklin has been requested by the Smith & Hammond Co. to co-operate with them in the management of their bogs. The plan in brief is to pay Dr. Franklin for managing a group of their bogs in Falmouth and vicinity, the payments to go toward the salary of an assistant at the Sub-Station. The advantages of such an arrangement would be the relief of Dr. Franklin from routine at the bog, which could be just as well done by a cheaper man, and the development of Dr. Franklin by a wider field for observation and experience as a superintendent. The Experiment Station would, however, stand in the position of providing one company with an expert's services, which it might find difficult and even impossible to extend to others who might be willing to pay for it.

It has been found necessary to amend the Fertilizer Law, in order to prevent certain foreign corporations doing business through traveling agents without first paying license fees and filing statements. This matter is now in the hands of Mr. Fitz-Henry Smith, Jr. who is preparing the amendments needed.

In accordance with the vote of the Committee a Seed Law has been prepared and is appended. This law has been drafted in conference with Dr. Stone and meets his ideas of the needed legislation.

Dr. Lindsey has handed me a written communication, which I have indorsed and appended.

Dec. 30, 1912.

Fred W. Morse
Acting Director.

ANNUAL BUDGET. AGRICULTURAL EXPERIMENT STATION. 1913.

RESOURCES.

I. From the United States:			$30,000.00
1. Adams Fund	$15,000.00	(Investigation)	
2. Hatch Fund	15,000.00	(Investigation)	
II. From the State:			21,000.00
1. Appropriations	15,000.00	(Investigations)	
2. Feed Inspection Law	6,000.00	(Inspection)	
III. From Fertilizer Law: (Estimated)			10,000.00
1. Fertilizer License Fees	$10,000.00	(Inspection)	
IV. From Other Sources: (Estimated)			9,440.00
1. Agricultural Dept. Sales	$1,000.00	(Agr'l Dept.)	
2. Chemical Dept.	8,440.00	(Chem. Dept.)	
a. Sales	$1800.00		
b. Chemical Analyses	800.00		
c. Adv. Reg'y Testing	5600.00		
d. Inspt. Bab. Apparatus	240.00		
3. Cranberry Bog. No safe estimate possible.			
4. Graves Orchard. No safe estimate possible.			
V. Bills Receivable: (Estimated)			750.00
1. Graves Orchard Apples	470.00		
2. Cranberries	280.00		
VI. Balances on Hand:			3,084.29
1. Adams Fund	$401.46		
2. Hatch Fund	315.22		
3. Feed Law	1,061.45		
4. Fertilizer Law	1,467.39	3,165.52	
5. State Fund - overdraft		81.25	
TOTAL RESOURCES			$74,274.29
Reserved for December, 1913, U. S. Funds			2,500.00
NET RESOURCES			$71,774.29

ANNUAL BUDGET. AGRICULTURAL EXPERIMENT STATION. 1913.

EXPENDITURES. (Estimated)

I. Fertilizer Inspection			10,000.00
II. Feed Inspection			5,000.00
III. Investigation			47,363.00
1. Salaries		$33,090.00	
Present List	$32,873.00		
Increases	217.00		
2. Sub-Stations		3,100.00	
3. Departments		9,608.00	
4. Publications		1,150.00	
5. General Expense		375.00	
IV. Appropriated Receipts			9,440.00
1. Agricultural Dept. to Agriculture		1,000.00	
2. Chemical Dept. to Chemistry		8,440.00	
TOTAL EXPENDITURES			$72,763.00

[illegible] 1916.

[illegible]

I. Estimated Resources:

1. Adams and [illegible] Funds . . . . [illegible],000.00
2. State Appropriations . . . . . 15,00[illegible].00
3. Feed and Fertilizer Fees . . . 1[illegible],000.00
4. Receipts of Departments . . . 9,440.00
5. Bills Receivable and Cash on Hand . . . 3,[illegible] | 7[illegible]

Reserved for December, 1916, U. S. Funds | [illegible]0.00

Total Resources . . . . 7[illegible]

II. Possible Resources:

1. Cranberry Bog. No Estimate.
2. Grove Orchard. No Estimate.

III. Estimated Expenditures:

1. Fertilizer Inspection . . . . . 1[illegible],000.00
2. Feed Inspection . . . . [illegible],[illegible]00.00
3. Investigation . . . . 47,[illegible]2.00
4. Appropriated Receipts . . . . [illegible],44[illegible] | 7[illegible],753.00

Overdraft . . . . [illegible]8[illegible].71

APPORTIONMENT [illegible]

December 1, 1912 to November 30, 1913.

Classification	Approp. 1912	Available 1913	Expended 1913	Balance 1913	Approp. Recom. 1914	Com. Vote 1913
Administration	1500.[illegible]	1[illegible].94	1[illegible].19	[illegible]	1[illegible]	
Agriculture*	[illegible]100.00	[illegible]020.80	[illegible]	-4[illegible].02	[illegible]	
Asparagus	500.00	500.00	7[illegible].04	-[illegible]	750.00	
Botany	1500.00	1506.17	11[illegible]	[illegible].94	[illegible]	
Chemistry**	2900.00	11890.25	9[illegible].06	[illegible].19	400.00	
Cranberry	3000.00	3,3[illegible]	[illegible].96	[illegible]	[illegible]	
Entomology	700.00	700.[illegible]	[illegible]	[illegible]	[illegible]	
Feed inspection	5750.00	5[illegible].45	[illegible]	1[illegible]1.45	[illegible]	
Fertilizer inspt.	-	1000[illegible].90	[illegible]	14[illegible]	1[illegible]	
Freight & Express	[illegible].00	[illegible]	[illegible]75.76	[illegible].04	[illegible]	
Graves Orchard	300.00	300.00	[illegible]	-[illegible]46.33	[illegible]	
Horticulture	1500.00	1[illegible].50	1579.15	-1[illegible]	1500.00	
Library	300.00	300.[illegible]	[illegible].48	[illegible]	75.00	
Meteorology	400.00	400.00	[illegible]	[illegible].95	[illegible]	
Poultry	250.00	250.00	247.55	[illegible].45	[illegible]	
Publications ***	2400.00	2400.00	1[illegible].53	[illegible].47	[illegible]	
Salaries(investigation)****	[illegible]	27500.00	[illegible]0.59	7[illegible]	[illegible]	
Treasurer's off.	350.00	300.00	[illegible].16	[illegible]	[illegible]	
Veterinary	[illegible]	[illegible]	[illegible].16	[illegible]	[illegible]	
Agricultural Receipts					1000.00	
Chemistry Receipts					[illegible]	
			[illegible].41		[illegible].96	

OK.

Remarks on Apportionments and Expenditures.

* Agriculture had a large overdraft last year, which so far as can be learned without comparing the Director's books with the Treasurer's, was due to carrying over some bills from the previous year and to spending this year up to the limit if the sales, some of which are still uncollected.

** Chemistry in 1912 had an apportionment for the collection and analysis of fertilizers, which required a double entry of all fertilizer work done in the department. This was not made clear to the Treasurer, and the charges to Chemistry apportionment were not made. The unexpended balance in the Chemistry apportionment really represents approximately the amount spent for fertilizer inspection by Dr. Lindsey's department.

*** Publications in 1912 received an apportionment including the estimates for the feed inspection and fertilizer inspection bulletins, which were charged to the feed law and fertilizer law. This year these bulletins are omitted from the apportionment.

**** Salaries in 1912 included in the apportionment all salaries. This year, the salaries for feed inspection and fertilizer inspection are omitted from this apportionment and included in the Feed and Fertilizer apportionments.

In compiling the resources and in apportioning the funds, no account of prospective cranberry crop or apple crop has been made, because of the uncertainty of the yield and the amount of receipts which can be collected during the fiscal year. The cranberry sub-station has been cut in its apportionment to $2000 because ~~over~~ about $1200 of the expenditures in 1913, were due to three bills which were carried over from 1911. Other departments have been cut in varying proportions, ranging from 5 percent. to 10 percent. below last year's allowances.

Salary increases have been held to the minimum amounts, which were promised before the Acting-Director took charge. Three additional salaries to the amount of $3067 are on account of the Poultry Department, and are included in the Investigation group.

Asparagus and Graves' Orchard apportionments are increased because the former allowances have been found to be too low for two successive years.

The total estimated expenditures are nearly $1000.00 above the estimated net resources, and this overdraft can be met by drawing on the reserve government funds; but will in all probability be taken care of by the cranberry crop.

PAY-ROLL. AGRICULTURAL EXPERIMENT STATION. 1912-1913.

Name	Present Rate.	New Rate		Total Due in Year
Alcock, James R.	700.00	-		700.00
Allen, H. J.	780.00			780.00
Beals, C. L.	840.00	960.00 July 1.		900.00
Bourne, A. I.	1080.00	-		1080.00
W. P. Brooks,	3500.00	-		3500.00
Chapman, George H.	1750.00	-		1750.00
Church, Lucia G.	800.00	-		800.00
Crocker, Jessie V.	680.00	720.00 July 1.		696.66
Felton, F. Ethel	720.00	-		720.00
Fernald, H. T.	800.00	-		800.00
Fisher, Lina	300.00	-		300.00
Franklin, H. J.	1800.00	-		1800.00
Gallond, Grace, L.	600.00	-		600.00
Gaskill, E. F.	1320.00	-		1320.00
Gates, E. N.	440.00	-		440.00
Goodale, H. D.	-	1000.00 Feb. 1		1066.67
Green, C. R.	200.00	-		200.00
Haskins, H. D.	2000.00	-		2000.00
Holland, E. B.	2000.00	-		2000.00
Howard, Alice M.	720.00	-		720.00
Howard, J. T.	960.00	-		960.00
Jones, C. P.	840.00	900.00 Feb. 1	OK	940.00
Kenney, F. C.	500.00	-		500.00
Kingsbury, L. R.	600.00	-		600.00
Larrabee, E. A.	960.00	1060.00 July 1.		1010.00
Lindsey, J.B.	2500.00	-		2500.00
Morse, F. W.	2600.00	2000.00 Sept. 1		2450.00
O'Donnell, Bridie M.	620.00	-		620.00
Osgrander, J. L.	500.00	-		500.00
Paige, J. B.	500.00	-		500.00
Reed, J. C.	1220.00	-		1220.00
Ruprecht, R. J.	960.00	-		960.00
Sayer, J. W.	600.00	-	OK	600.00
Sears, F. C.	250.00	-		250.00
Shaw, J. K.	1500.00	-		1500.00
Smith, P. H.	1900.00	-		1900.00
Stone, G. E.	1000.00	-		1000.00
Walker, L. B.	1400.00	-		1400.00
Waugh, F. A.	400.00	-		400.00
Asst. Chem. Fertilizer	-	840.00 Mar. 1.	OK	630.00
				43403.33

Other salaries not at meeting

ABERDEEN SUBSTATION ACCOUNTS.

December 1, 1911 to November 30, 1912.

Rent	45.00	
Labor,	557.60	
Fertilizers,	71.25	
Seeds,	6.16	
Spray Material,	6.00	
Freight & Cartage	29.03	
Telephone	15.00	
Traveling Expenses	3.80.	$773.84

Apportionment recommended for 1913, $700.00

CRANBERRY SUBSTATION ACCOUNT.
December 1, 1911 to November 30, 1912.

Expenditures.

I. Bog Account.

1. Maintenance

Banding Bog,	$294.66	
Weeding Bog,	20.63	
Care of Bog, Winter 1911-12	10.65	
Mowing Upland and Burning Brush	116.21	
Engine and Pump Repairs	316.70	
Gasolene and Oil,	98.16	
Tools and Equipment	21.11	
Miscellaneous Labor	58.79	
Cement Flume	19.03	$995.94

2. Harvesting

Picking Cranberries	241.89	
Running Separator	40.84	
Screening	94.66	
Packing	23.50	
Raking Vines after Harvest	18.38	
Packing Materials	458.50	882.77

3. Contingent Expenses.

Teaming	19.05	
Telegraph and Express	2.97	22.02

4. Permanent Improvements

Labor on Roadway	43.53	
New Propellors on Pump	81.45	124.98

Total Expenditures on Bog ---------- $1965.71

II. Experiment Account.

1. Construction.

Labor and material	$632.20	
Surveying	45.00	$677.20

2. Experimental

Labor	148.03	
Supplies	94.48	
Spraying Materials and Tools	19.06	
Fertilizers	3.82	
Sundries	13.40	279.79

3. Stationery ----------			98.25
4. Traveling Expenses----------			90.96
5. Contingent Expense			
Freight & Express ----------		32.41	
Telephone ----------		18.89	
Office Rent ----------		17.00	68.30
6. Furnishings ----------			13.75
7. Damages, Andrew's Log ----------			15.00
Total Expenditures on Experiments ----------			$1143.25
Total Expenditures, Cranberry Account ---------			$3228.96

Receipts.

1. Cranberries, Crop 1911, ----------		$1458.93	
2. Sale of Vines ----------		10.00	
3. Sale of Boxes ----------		.40	
4. U. S. Weather Bureau,----------		150.00	
5. Cranberries, Crop 1912 ----------		718.56	
Total Receipts, Cranberry Account ----------			$2337.89
Bills Receivable, Dec. 1 (estimated) ------		150.00	
Cranberries on hand " " " -----		130.00	280.00

The following amounts were paid during the year on bills carried over from 1911 account:

Labor, Oct. & Nov. 1911, ----------	$385.45	
Barrels for 1911 crop, ----------	369.00	
Extras on Screenhouse ----------	426.11	
Office Rent ----------	17.00	
Total----------		$1197.56

The expenses actually incurred during 1911 - 1912, were therefore, $2031.40 and there are only small items outstanding.

Apportionment recommended for 1913 ---------- $2000.00

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FEED LAW ACCOUNT.
December 1, 1911 to November 30, 1912.

Receipts.

Balance on hand Dec. 1, 1911	$1676.45	
State Appropriation	3750.00	$5426.45

Expenditures

Collection Expenses, Traveling	$367.81	
Labor Preparing Samples-Janitor	50.34	
Salaries	2655.34	
Laboratory Expenses	201.85	
Office Supplies & Telephone	94.91	
Bulletins #139, $275; #142, $400	675.00	
Circulars, Affidavits, Etc.	56.35	
Expert Service - Legal Advice	160.00	
" " Microscopic	21.77	
Traveling - Official Business	58.47	
Miscellaneous	5.00	$4344.84

Balance available for Feed Experiments ------ $1081.61

Estimates for 1912-1913.

State Appropriation		$6000.00
Salaries apportioned at present rates	$3810.00	
Expenses as in 1912	1016.00	
Bulletin as in 1912	400.00	
Unappropriated	774.00	$6000.00

FERTILIZER LAW ACCOUNT.
December 1, 1911 to November 30, 1912.

Receipts - Fertilizer Fees ---------- $ 10000.00

Expenditures

Collection Expenses		$859.58	
Labor - Lab. Asst.	$107.33		
Janitor	77.26		184.59
Salaries		5911.67	
Laboratory Supplies		1124.98	
Repairs & Changes in Lab.		134.55	
Office & Misc. Supplies		232.13	
Library		20.80	
Delegate to A. A. A. C.		34.55	
Miscellaneous Fertilizer Expts.		54.25	
Phosphatic Slag Experiment		17.97	$8575.07
Balance			1424.93

Bulletin for 1913 is in press and is to be met from the above balance, the residue is then available for fertilizer experiments.

Estimates for 1912-1913.

License Fees estimated like 1912		10000.00
Salaries, apportioned at present rates,	6504.00	
Expenses as in 1912	2591.00	
For 1913 Bulletin and Miscellaneous	895.00	10000.00

Receipts.

Receipts on hand Dec. 1, 1921 ---------- $[illegible]
Total appropriation, 1922 ---------- [illegible]

Disbursements

Collection expenses, Chemistry ----------
Labor performing function ----------
Salaries ----------
Laboratory expenses ----------
Office expense ----------
Printing, 1922, 1923, 1924 ----------
Diagrams, drafting, etc. ----------
Import service ----------
Miscellaneous ----------
Warning - Notifying farmers ----------
Balance unexpended ----------

Receipts for 1921-1922.

Original appropriation ----------
Balance appropriated ex [illegible] ----------
Refunds on 1921 ----------
Balance on hand Dec. 1, 1921 ----------
Unapportioned ----------

Receipts - Materials used ----------

Disbursements

Collection expenses ----------
Labor - Insp. ----------
Office ----------
Printing ----------
Laboratory supplies ----------
Import service ----------
Express & cartage ----------
Postage ----------
Telephone ----------
Miscellaneous expenses ----------
Balance ----------

Collections for 1921-1922.

Original appropriation ----------
Balance unexpended ----------
Refunds on 1921 ----------

G.R.[illegible] Orchard Account.
December 1, 1911 to November 30, 1912.

Expenditures		
Rent	1[illegible].00	
Labor	35[illegible].92	
Fertilizers	57.36	
Nursery Stock & Cover Crops	17.65	
Barrels	86.00	
Freight & Cartage	5.50	[illegible]74.35
Receipts:		
Apples		30.00

The total crop was estimated to be worth $500.00, of which there are yet to be sold about $470.00.
The rent item includes two annual payments.
The labor item is large on account of neglect in the previous years

Apportionment recommended for 1913 ---------- $400.00

P U B L I C A T I O N S .

December 1, 1911 to November 30, 1912.

		Pages	Edition	Cost.
ANNUAL REPORT:				
Part I	Twenty-Fourth Annual Report	287		
Part II	" " " "	90		
Separata from Annual Report				
	Report of Entomologist	8	100	3.05
	Insects of the Year 1911	4	100	1.37
	Report of the Botanist	108	500	61.45
	Chemistry of Arsenical Insecticides	36	100	11.80
	Cranberry Substation	12	1600	14.38
	Heredity, Correlation and Variation in Garden Peas	22	100	7.65
BULLETINS:				
No. 140	Inspection of Commercial Fertilizers	86	17000	671.70
No. 141	The Microscopic Identification of Cattle Foods	71	3000	151.99
No. 142	Inspection of Commercial Feed Stuffs	48	16500	401.00
CIRCULARS:				
No. 32	An Act to Regulate the Sale of Commercial Fertilizers	4	500	6.50
No. 33	An Act to Regulate the Use of Utensils for Testing the Composition or Value of Milk and Cream	11	300	16.50
No. 34	An Act to Regulate the Sale and Analysis of Food Stuff Used for Live Stock and Poultry	7	1200	16.50
No. 22	(Reprint) Poultry Manures, Their Use and Treatment.	4	500	7.75
METEOROLOGICA	BULLETINS 12 Nos	4	5400	136.00

SPECIAL APPROPRIATION.

As Voted by Committee on Buildings & Grounds, April 18, 1912.

Appropriation		$750.00
Expenditures		
1 Pair Horses	$700.00	
1 Pair Harnesses	50.00	$750.00

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT

Bellevue Hotel, Boston, July 7, 1913.

PRESENT: Messrs. Preston, Frost, Wilfrid Wheeler, and Acting President Lewis. Treasurer Kenney was also present.

It was

VOTED: To approve the following increases in salaries and to authorize the payment of the same beginning July 1, 1913: -- Salary Increases

	Increase	Total
C. L. Beals,	$120	$ 960
E. A. Larrabee,	120	1080
H. J. Allen,	60	840

with the investigation of the European [illegible]

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

State House, Boston, November 25, 1913, at 4:30 p.m.

PRESENT: Messrs. Preston, Frost, Pollard, Wilfrid Wheeler, Acting President Lewis and Director Brooks.

Ralph J. Watts was appointed clerk pro-tem.

It was

VOTED: That all department balances in the experiment station be cancelled at the close of the present fiscal year. Department Balances.

It was

VOTED: To recommend to the Trustees that the following salary increases take effect December 1,1913: Salaries

Name.	Present Salary.	Proposed Increase.	Proposed Salary.
H.J. Franklin,	$1800.	$200.	$2000.
A. I. Bourne,	1080.	120.	1200.
E. F. Gaskill,	1320.	180.	1500.
H. D. Haskins,	2000.	250.	2250.
E. B. Holland,	2000.	250.	2250.
F. W. Morse,	2000	250.	2250.
J. K. Shaw,	1500.	300.	1800.
P. H. Smith,	1900.	100.	2000.
L. S. Walker,	1400.	100.	1500.

It was

VOTED: To recommend to the Trustees that the following salary increases take effect July 1,1914:

J. P. Buckley,	$ 960.	$120.	$1080.
J. P. Norton,	420.	60.	480.
R. W. Ruprecht,	960.	120.	1080.
C. L. Beals,	960.	120.	1080.
W. S. Frost,	840.	120.	960.
J. T. Howard,	960.	60.	1020.
C. P. Jones,	960.	170.	1130.
Lucia G. Church,	840.	60.	900.
Jessie V. Crocker,	720.	60.	780.
Alice M. Howard,	720.	60.	780.
Bridie E. O'Donnell,	720.	60.	780.
George H. Chapman,	1750.	50.	1800.
O. L. Clark,	1200.	300.	1500.
Grace E. Gallond,	600.	60.	660.

It was

VOTED: To recommend to the Trustees that Mr. O. L. Clark be appointed assistant in botany at a salary of $1200 per year to take effect December 1, 1913. O.L.Clark.

VOTED: To recommend to the Trustees that the Director be authorized to prepare a bill for presentation to the next legislature providing for such change in the method of the publication of experiment station bulletins as will conform to the plan of publication endorsed by the Association of American Agricultural Colleges and Experiment Stations. In regard to a form of report.

VOTED: To recommend to the Trustees the adoption of the proposed apportionment of experiment station funds for 1913-14, as submitted by the Director, with the exception of the proposed apportionment for publications: Apportionment 1913-1914.

Classification.	Apportionment 1913.	Available 1913	Expended 1913.	Balance 1913.	Apportionment 1914.
Administration,	$1600.00	$1604.54	$ 800.96	$ 805.58	$1800.00
Agriculture,	2000.00	4560.90	4401.99	158.91	2100.00
Asparagus,	700.00	700.00	483.27	216.73	700.00
Botany,	1350.00	1350.00	1494.99	-144.99	1500.00
Chemistry,	400.00	9247.73	9157.84	89.89	1100.00
Cranberry,	2000.00	2000.00	2552.83	-552.83	3000.00
Entomology,	650.00	653.20	393.51	259.69	700.00
Feed Inspection,	6000.00	7081.45	6730.35	351.10	6000.00
Fert.Inspection,	10000.00	12047.39	10545.06	1502.33	10000.00
Freight & Express,	300.00	300.56	264.53	36.03	300.00
Graves' Orchard,	400.00	400.00	466.93	- 66.93	800.00
Horticulture,	1300.00	1378.20	1449.46	- 71.26	1350.00
Library,	75.00	75.00	64.00	11.00	300.00
Meteorology,	375.00	375.00	266.48	108.52	375.00
Publications,	1150.00	1150.00	971.77	178.23	2400.00
Salaries,	33090.00	33090.00	32623.70	466.30	37090.86
Treasurer,	300.00	300.00	371.77	- 71.77	350.00
Veterinary,	725.00	725.00	675.52	49.48	725.00
Poultry,	908.00	908.00	941.88	- 33.88	900.00
Agricultural Receipts,					1500.00
Chemistry Receipts,					3000.00
			$74656.84		$75990.86

VOTED: To refer to the Trustees without recommendation the proposed apportionment of funds for publications.

VOTED: To recommend to the Trustees that $200 per year be allowed the Director for travel in connection with his official duties. Travel of Director.

VOTED: To recommend to the Trustees that the station be authorized to transfer the supervision of cow testing to the department of animal husbandry of the college as soon as the head of this department can make the necessary arrangements. Cow Testing.

It was

VOTED: To adjourn subject to the call of Acting President Lewis and the Director of the Experiment Station.

with the investigation of the European corn

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Hotel Bellevue, Boston, January 8,1914, at 9:45 a.m.

PRESENT: Messrs. Preston, Ward, Wilfrid Wheeler, and Acting President Lewis, and Director Brooks; Treasurer Kenney was also present.

The Director presented various projects for improvements and new equipment for the Experiment Station. It was

VOTED: To recommend to the Committee on Finance that the following projects be approved:

Equipment.

Hayfork, - - - - - - - -	$ 25.
Addressing machine, - - -	150.
Power sprayer, - - - - -	125.
New horse, - - - - - - -	200.

VOTED: To defer action on the project for an additional breeding house for the department of poultry husbandry until a later date.

Improvements

VOTED: To refer the projects for improvements, to the Committee on Buildings and Grounds with the recommendation that all be approved, with the exception of the projects for improvements to the farm house and to the creamery.

The Director presented an outline of a proposed organization of the experiment station staff and work.

It was

VOTED: To refer to Director Brooks and Mr.Preston the question of the acceptance of Dr.Stone's patent of a spray nozzle.

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Hotel Bellevue, Boston, June 11, 1914, at 2:00 p.m.

PRESENT: Mr. Preston, President Butterfield and Dr. Brooks.

Director Brooks stated that Miss F. Ethel Felton, First Clerk in the Department of Chemistry of the Experiment Station, would probably resign during the coming summer, and on his recommendation it was

First Clerk, Experiment Station.

VOTED: To recommend to the Finance Committee that on the resignation of Miss Felton, Miss Alice M. Howard be promoted to First Clerk at a salary of $840. per year.

VOTED: To recommend to the Finance Committee that Miss Felton be allowed salary for one month of the three that she was absent on account of illness from November 1913 to February 1914.

Miss Felton.

VOTED: To recommend to the Finance Committee that Miss Grace E. Gallond be classified as a clerk rather than as a stenographer, and that her salary be made $720. per year.

Miss Gallond

VOTED: To recommend to the Finance Committee that the salary of Miss Fay L. Milton be made $660. per year, and the salary of Miss Mellor be made $330 per year from Experiment Station funds.

Miss Milton Miss Mellor.

VOTED: That Prof. Graham be allowed to pay Mr. Sayre additional compensation from the apportionment of funds granted the Department of Poultry Husbandry by the Experiment Station, subject to the approval of the Director of the Station.

Mr. Sayre.

VOTED: To recommend to the Trustees that the assignment of the patent of Dr. G. E. Stone, which assignment has been recorded, be accepted.

Dr.Stone's Patent.

VOTED: That Dr. H. D. Goodale represent the Experiment Station at a meeting of the Association of Instructors and Investigators in Poultry Husbandry, to be held at Quebec in August, 1914.

Dr. H.D. Goodale.

The Director presented evidence of the pressing need for additional land for experimental purposes, and it was

Land for Experiment Station.

VOTED: To request a committee consisting of Mr.Preston, President Butterfield, and Director Brooks to consider the whole question of land for the Experiment Station.

Dr.Lindsey, Leave of Absence.

VOTED: To recommend to the Trustees that Dr. J.B.Lindsey be granted a leave of absence with pay, from date until September 1, 1914, in accordance with the advice of his physician, and that the question of extension of this leave of absence be left to the President with power.

VOTED: That during the absence of Dr. Lindsey, Mr. F.W. Morse serve as Vice Director of the Experiment Station.

Title of J.C.Graham.

VOTED: That Professor John C. Graham be made a member of the Experiment Station Staff, without salary, but with the title of Head of the Department of Poultry Husbandry.

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Hotel Bellevue, Boston, January 6, 1915, at 7:00 p.m.

PRESENT: Messrs. Preston, Mortimer, Pollard, Wilfrid Wheeler, President Butterfield and Director Brooks.

The Director presented the annual budget and apportionment of Experiment Station funds for 1914-1915. It was

VOTED: To cancel all department balances or overdrafts for the year ended November 30,1914.

VOTED: To recommend to the Trustees the employment of an assistant in the department of Veterinary Science of the Experiment Station, at a salary not to exceed $1200. per year. — Assistant in Dept.of Veterinary Science.

VOTED: To apportion $1000. for the present fiscal year for investigational work in the department of Agricultural Economics, the precise projects to be undertaken to be decided upon by Mr. Wilfrid Wheeler, Director Brooks, and Professor Cance. — Work in Dept.of Agricultural Economics.

VOTED: To approve the project as submitted for investigational work in soils, to be conducted by the department of Microbiology. — Dept.of Microbiology

VOTED: To approve as submitted the project for investigational work in milk Microbiology.

VOTED: To recommend to the Trustees the following salaries;

R.L.Coffin, $900. per year to take effect Dec.1,1914; transferred from "labor" account. — Salary adjustment.

G.E.Gage, $500. per year to take effect July 1, 1915; transferred from "Instruction" account.

F.H.Van Suchtelen, $500. per year to take effect July 1, 1915; transferred from "Instruction" account.

VOTED: To recommend to the Trustees the following salary increases to become effective July 1, 1915: Salary Increases.

A.I. Bourne,	from	$1200.	to	$1320.
F.F. Gaskill,		1500.		1680.
H.D. Goodale,		2000.		2250.
H.D. Haskins,		2250.		2500.
E.B.Holland,		2250.		2500.
F.W. Morse,		2250.		2500.
J.K. Shaw,		1800.		2000.
P.H. Smith,		2000.		2250.
L.S. Walker,		1500.		1620.

VOTED: To recommend to the Trustees the adoption of the apportionment, as presented, for the year 1914-1915.

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

President's Office, M.A.C., May 21, 1915, at 4:15 a.m.

PRESENT: Messrs. Preston, Frost, Mortimer, Pollard, President Butterfield, and Director Brooks.

It was

VOTED: To recommend to the Finance Committee the following salary increases to become effective July 1, 1915. Salary Increases.

J. R. Alcock,	from	$ 700.	to	$ 780.
H. L. Allen,		840.		900.
C. L. Beals,		1080.		1200.
J. P. Buckley,		1080.		1200.
G. H. Chapman,		1800.		2000.
O. L. Clark,		1500.		1700.
W. S. Frost,		960.		1080.
C. P. Jones,		1130.		1200.
R. W. Ruprecht,		1080.		1200.

It was

VOTED: To recommend to the Trustees that Prof. J. B. Lindsey be allowed two months' vacation, with pay, for the summer of 1915. Vacation for J.B. Lindsey.

It was

VOTED: To recommend to the Trustees that Mr. R. W. Ruprecht, Assistant Chemist in the Experiment Station, be granted leave of absence, without pay, from October 1, 1915, to June 30, 1916, for the purpose of pursuing advanced study at Cornell University. Leave of Absence for R. W. Ruprecht.

It was

VOTED: That from October 1, 1915, to June 30, 1916 Mr. C. L. Beals, Assistant Chemist in the Experiment Station, be transferred from the Feed Division to the Research Division and that the President be authorized to appoint a temporary substitute for carrying on the work in the Feed Division now done by Mr. Beals. Transfer of C.L. Beals.

It was

Appointment of R. P. Armstrong.

VOTED: To recommend the appointment of Mr. Robert P. Armstrong as Graduate Assistant in Pomology for the next College year at a salary of $540. per year for half-time service.

It was

Graduate Assistant in Poultry Husbandry.

VOTED: To recommend to the Trustees that the position of Graduate Assistant be created in the department of Poultry Husbandry of the Experiment Station.

It was

Work in Market Gardening.

VOTED: To recommend the expenditure of $500. per year from Experiment Station funds for cooperative work in market gardening.

It was

Blueberry raising.

VOTED: To recommend to the Trustees that the Director of Experiment Station be authorized at his discretion to enter into a cooperative agreement with the U. S. Department of Agriculture for experimental work in blueberry raising, and to authorize the Treasurer to negotiate a lease of suitable land for this purpose.

The Committee adjourned at 5:45 and convened again at the President's office at 8:00 p.m.

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The following workers in the Experiment Station made verbal reports relative to certain projects carried on under their direction:

Prof. F. W. Morse,
Dr. J. B. Lindsey,
Mr. H. D. Haskins,
Dr. J. B. Paige,
Prof. F. A. Waugh,
Dr. J. K. Shaw,
Dr. H. T. Fernald,
Prof. A. V. Osmun,
Prof. J. C. Graham,
Dr. H. D. Goodale,
Dr. C. E. Marshall, Dr. A. E. Cance.

After the reports of the above mentioned men the Committee continued its executive session.

It was

Seed Law.

VOTED: To authorize the Director to prepare a tentative draft for a seed bill for Massachusetts, after such an investigation as he shall deem desirable, and to report on the same to this Committee.

It was

Status of G. E. Stone.

VOTED: That the chairman of this Committee serve with the Committee on Course of Study and Faculty in the consideration of the question of Dr. Stone's future relations with the College.

The Director presented a plan for special test work in Massachusetts under the general control of the Experiment Station, and it was

Industrial Tests.

VOTED: To endorse the plan as submitted. (see statement appended).

The Director reported that a small parcel of land in North Amherst had been leased for experimental work in poultry husbandry; the cost being $25. from April 1 to August 1, 1915. It was

Lease of Land.

VOTED: To confirm the arrangement as above stated.

It was

Pots for Station Use.

VOTED: To authorize the Director to obtain additional pots for experimental work in fertilizers, and that the cost be borne from the funds secured from fertilizer fees.

GENERAL UNDERSTANDING IN THE EXECUTION OF SPECIAL TEST WORK OF THE EXPERIMENT STATION.

The test is subject to the following conditions:

1. The head of the department must be free to determine what constitutes the test.

2. After the completion of the test-work, the publication of the results obtained shall be subject to the recommendations of the head of the department and the approval of the Director of the Experiment Station. Such results must be interpreted independently and only in the light of scientific knowledge and findings.

3. All expenses involved in such a test must be borne by the petitioner and guaranteed or paid to the Treasurer of the College.

4. Research work or ideas suggested by the test may be utilized freely by the Experiment Station in connection with its usual functions.

5. The test-work may be performed by sufficiently trained individuals, as assistants, under the immediate supervision of the head of the department who must vouch for the results.

6. Such assistants shall be known as "Graduate Industrial Assistants.*. Their appointment and assignment shall be subject to the same regulations as control the appointment of graduate assistants. The period of engagement shall not be for less than one year of which one month shall be allowed for vacation. Unless otherwise arranged, the year shall begin September 1. The rate of remuneration for half time of four hours per day, shall be the same as for graduate assistants, $420. for the first year, $480. for the 2nd year, $540. for the third year. Modifications of this plan of assistant service shall be allowed when agreeable to all interested.

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* The right to change this designation is reserved to the institution.

MINUTES OF THE MEETING OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

M.A.C., President's Office, Tuesday, June 15, 1915, at 8:30 .m.

PRESENT: Messrs. Preston, Wilfrid Wheeler, Pollard, Frost, Mortimer, President Butterfield and Dr. Brooks.

Experiment Station Council.

The Director recommended the establishment of an Advisory Council to the Station to be made up of men representing important agricultural interests and organizations. It was

VOTED: To recommend to the Trustees that the organization of such a council be authorized, and that the proposed personnel of the council be left with a committee, consisting of Mr. Preston, President Butterfield, and Director Brooks.

Walsh Land.

Director Brooks stated that he should like to have the Station have full use of the so-called Tillson farm, and recommended that the Station become responsible for the rental of this farm for a period of years. It was

VOTED: To recommend to the Trustees that the Station rent the Tillson farm of Mr. Cowls for a period of years.

Research in Bee Diseaæs

The Director presented a project for investigation of bee diseases. It was

VOTED: To approve the project, and to leave the appointment of the assistant to carry on the work to the President and Director.

MINUTES OF THE TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Bellevue Hotel, Boston, July 21, 1915, at 4:00 p.m.

PRESENT: President Butterfield, Mr. Preston, Dr. Brooks; also Dr. Marshall and Professor Lockwood.

The general question of policy of industrial scholarships paid out of funds outside of the college was taken up. It was the opinion of the members present, acceded to by Messrs. Wilfrid Wheeler, Frost and Mortimer, over the telephone, that the arrangement made with the De Laval people be carried out for the present year, and then that the whole matter be brought before the Trustees at a meeting some time during the coming college year. Industrial Tests.

Dr. Brooks presented a statement relative to the conclusion of arrangements for a cooperative study of blueberries. Blueberry Investigations.

Dr. Brooks also presented a statement relative to an offer from Mr. Charles S. Mellen for land in Berkshire County, for the purpose of experiments, the cost of which Mr. Mellen agrees to defray. Experimental Land: Berkshire County.

Dr. Brooks presented a plan which had been agreed to by Director Hurd, for the employment of members of the Extension Service staff to collect blood samples from poultry flocks supposed to be affected with white diarrhea. It was Collection of blood samples.

VOTED: To authorize this arrangement for the present.

- - - LIST OF COMMITTEE MINUTES - - -

Trustees Committee on EXPERIMENT DEPARTMENT

Date	Place	Notices sent	Minutes	Remarks
1911 June 19	Amherst House Amherst		O. K.	
Sept. 7	Wareham		O. K.	
1912 Jan. 4	State House, Boston	Dec. 30,'11	O. K.	
April 18	Amherst	April 15	O. K.	
Sept. 27	Amherst	Sept. 21	O. K.	
Nov. 7	State House,Boston	Nov. 4	O. K.	
1913. Jan. 2	State House,Boston	Dec.30,'12	O. K.	
July 7	Hotel Bellevue,	None sent	O. K.	
Nov. 25	State House,Boston	Nov. 18	O. K.	
1914 Jan. 8	Hotel Bellevue,Boston	Dec. 31	O. K.	
June 11	Hotel Bellevue	June 4	O. K	
1915 Jan 6	Hotel Bellevue	Dec. 31, 1914	O. K.	
May 21	M.A.C. Amherst	May 14	O. K.	
June 15	M.A.C. Amherst	June 12	O. K.	
July 21	Hotel Bellevue	July 15	O. K.	

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXPERIMENT STATION.

City Club, Boston, September 19,1918, at 6:00 p.m.

PRESENT: Messrs. Preston, Mortimer, Butterfield and Acting Director F.W.Morse.

The President reported the following changes in staff; and it was

VOTED: To confirm the following resignations and appointments:

RESIGNATIONS:

Name:	Title:	Effective:
S.H.DeVault,	Asst.Dept. Agric.Economics,	June 21,1918.

NEW APPOINTMENTS:

Name:	Title:	Salary:	Effective:
Mixer,Miss E.S.,	Asst.Chemist, Exp.Station,	$ 960.	Sept.1,1918.

Increase in salary of Mrs. S.F.Wheeler, from $800. to $900. August 1, 1918.

It was

VOTED: To confirm the leave of absence of Dr. J.K.Shaw for six months on full salary.

The Acting Director recommended the employment of Joseph L. Kelly as assistant at the cranberry sub-station, with a salary of $1080. per year, same to take effect October 1st.

It was

VOTED: To adopt the recommendation.

The Acting Director reported the matter of an increase in apportionment to the Entomological Department on account of the expense of Mr. Vinal's travel in connection with the investigation of the European Corn Borer.

It was

VOTED: TO authorize the Acting Director to increase the apportionment by the amount of $300.

The Acting Director reported a canvass of the teaching staff of the college, relative to the possibility of their doing some research work during the war emergency.

It was

VOTED: TO leave this matter to the Acting Director and the President with power.

It was

VOTED: To recommend to the board of Trustees that beginning October 1, 1918 the title of Dr. William P.Brooks be that of Consulting Agriculturist of the Experiment Station and that his salary be at the rate of $2400. per year.

It was also

VOTED: That appropriate resolutions of appreciation be presented to the Board and that the Trustees recognize in some appropriate way the thirtieth anniversary of Dr. Brooks' official connection with the college which will occur in January, 1919.

The Acting Director presented the items of the necessary budget for the fiscal year 1919, and it was

VOTED: To recommend to the Trustees that the Legislature be requested to appropriate $40,000. for the use of the Experiment Station during the fiscal year 1919.

The Acting Director made a recommendation relative to an approximate 10% increase in the salaries of the members of the Experiment Station staff.

It was

VOTED: To recommend to the Trustees substantially these increases in salaries:

P.J.Anderson,	$ 52.50
J.R.Alcock,	60.
H.L.Allen,	90.
C.L.Beals,	150.
A.I.Bourne,	132.
G.H.Chapman,	210.
R.L.Coffin,	60.
E.F.Gaskill,	180.
J.T.Howard,	120.
O.L.Clark,	90.
C.P.Jones,	150.
S.C.Vinal,	120.
L.S.Walker,	172.
Mrs. S.W.Wheeler,	66.

It was

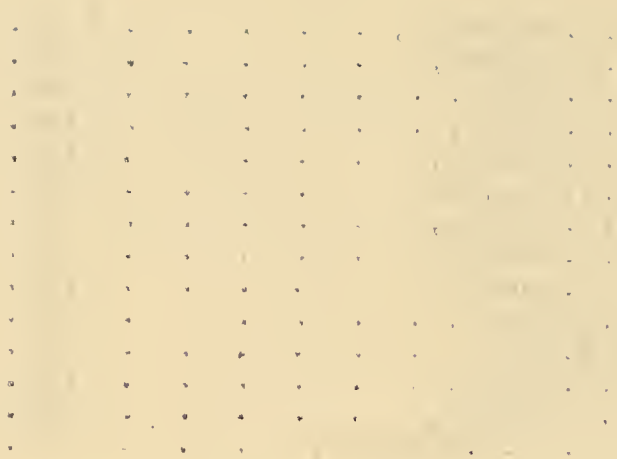
VOTED: To confirm the executive order of the President, increasing the salary of W.S.Krout to $1900. per year and of H.B.Pierce to $1500. per year, same to take effect October 1, 1918.

In executive session, it was

VOTED: To increase the allowance to Professor Morse for services as Acting Director from $600. to $800. per year, the same to take effect October 1,1918.

Committee adjourned.

K.L.Butterfield,
Secretary.



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MINUTES OF THE MEETING OF THE TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Hotel Bellevue, Boston, Mass., Dec. 27,1917.

PRESENT: Messrs. Preston, Frost, Pollard, and President Butterfield; Dr. Brooks being ill, Dr. Lindsey was present from the Station.

Developing and patenting of a cranberry harvesting machine.

Dr. Franklin presented tentative proposals for an agreement between himself and the Station relative to the development and patenting of a machine for harvesting cranberries.

It was

VOTED:;To leave the matter to the President and the Director to state the general views of the Committee to Dr. Franklin.

Tobacco field investigations.

Dr. Lindsey reported on the cost of tobacco investigations, and the President explained briefly the results of a conference in Amherst, December 26, on a matter of continuing tobacco field experiments.

Costs of blood tests

Dr. Lindsey also reported in regard to costs of blood tests. The question was raised concerning increasing fees for these tests. The opinion seemed to prevail that it was unwise at present to increase these fees.

Dr. Lindsey presented Dr. Marshall's project for making investigations in canning and preserving, a project calling for the employment of four graduate assistants and some laboratory expense.

It was

VOTED: To endorse Dr. Marshall's project for investigations in canning and preserving, and to approve the employment of four graduate assistants in accordance with the recommendation. — Investigations in canning and preserving

It was

VOTED: To recommend to the Trustees that the salary of Mr. G.L. Beals should be increased to $1500. a year, to take effect January 1, 1918. — Salary of C.L.Beals

It was

VOTED: To recommend to the Trustees that the salary of Mr. C. P. Jones be increased to $1500. a year, to take effect January 1, 1918. — Salary of C.P.Jones

It was

VOTED: To recommend to the Trustees that the salary of Mr. W. S. Krout be increased to $1700. a year, to take effect January 1, 1918. — Salary of W.S.Krout

It was

VOTED: To endorse the President's arrangement with Mr. A.I. Bourne, by which he is to receive an increase of $20. a month for five months while Dr. Fernald is absent. — Extra compensation for Mr.Bourne

It was

VOTED: To recommend to the Trustees the advancement of Miss Welch from stenographer to clerk, with the accompanying increase of salary. — Promotion of Miss Welch

It was

VOTED: To allow Dr. Chapman to assist the Amherst Exemption Board for approximately two weeks. — Service of Dr.Chapman onAmherst Exemption Board

It was

VOTED: To recommend to the Trustees the apportionment of funds for the ensuing fiscal year as presented by the Director, with the following changes: — Apportionment of funds 1918

The gross apportionment for Botany be made $2250. instead of $1600., and the gross apportionment for Chemistry be $10,450 instead of $10,300.

It was

VOTED: To recommend to the Trustees that steps be taken to secure legislation providing for a tonnage tax for inspection of commercial fertilizers and authorizing the Director to present the text of a bill embodying this change to the Trustees on January 4. Fertilizer Tonnage Tax

It was

VOTED: To recommend to the Trustees that steps be taken to secure an amendment to the fertilizer law that will prevent the sale of fertilizers which technically comply with the regulations, but which are practically valueless for use. Amendment to the Fertilizer Laws

The President recommended that the Committee bring before the Trustees the question of policy of agreeing with the Board of Agriculture upon a transfer of the administrative work of fertilizer, feed stuffs and other forms of purely control work to the Board of Agriculture, provided the scientific work shall remain at the College under such conditions that it can be carried on with the present degree of thoroughness. After discussion, it was Transfer of Control work to the Board of Agriculture

VOTED: To leave the matter to the Board of Trustees without recommendation.

Meeting adjourned.

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Hotel Bellevue, Boston, April 13,1917, at 9:00 a.m.

PRESENT: Messrs. Preston, Frost, Mortimer, Pollard, President Butterfield and Director Brooks.

Director Brooks reported on the prospective deficit in current receipts for fertilizer inspections and proposed methods of relieving the Station funds of this deficit. Mr. Myron S. Hazen, representing the National Fertilizer Association, appeared and stated to the Committee the position of the fertilizer manufacturers relative to the matter. Fertilizer Law.

After discussion it was

VOTED: To refer to the Board of Trustees without recommendation the question of the prospective deficit in the receipts from fertilizer inspections in 1917.

It was

VOTED: That in case the Trustees favor salary increases this year the Experiment Station Committee recommend the following increases:

Name:	Department and Rank:	Present Salary:	Increase Rec.by Committee:
W.A.Allen,	Assistant Chemist,	$ 840.	$ 260.
C.L.Beals,	Assistant Chemist,	1200.	120.
J.P.Buckley,Jr.,	Assistant Chemist,	1200.	120.
G.H.Chapman,	Research Physiologist,	2000.	100.
*O.L.Clark,	Assistant Plant Physiologist,		60.
R.L.Coffin,	Assistant,	960.	60.
H.J.Franklin,	Asst.Entomologist,Cranberry Invest.,	2000.	100.
E.F.Gaskill,	Assistant Agriculturist,	1680.	120.
H.D.Goodale,	Research Biologist,Poultry Husb.,	2250.	125.
J.T.Howard,	Inspector,	1080.	100.
C.P.Jones,	Assistant Chemist,	1300.	20.
J.B.Lentz,	Assistant in Veterinary Science,	1300.	300.
R.S.Scull,	Assistant Chemist,	840.	60.
J.K.Shaw,	Research Pomologist,	2100.	150.
P.H.Smith,	Chemist in charge of Feed & Dairy,	2250.	125.
J.B.Smith,	Assistant Chemist,	840.	120.
*F.H.vanSuchtelen,	Research Microbiologist,		100.
L.S.Walker,	Assistant Chemist,	1620.	100.

*Detailed data appears in Instruction (Course of Study)

It was

VOTED: To approve the following budget for work in connection with tobacco experimentation:

Budget for Tobacco Experiments.

Tobacco Experiments, 1917.

Expenses.

Salaries: Chapman, 6 months, - - - - -	$1000.00	
Field Assistant, - - - - -	583.35	$1583.35
Miscellaneous Expenses:		
Fertilizers, - - - - - - - -	$ 300.53	
Rent of plots: 2 @ $40.& 1 @ $90.	170.00	
Travel, auto 3800 miles at 7¢ -	266.00	
Meals, 70 @ 50¢ - - - - - -	35.00	
Meals and travel, assistant, -	55.00	$ 826.53
		$2409.88

Source of Funds.

Salary Budget, - - - - - - - - - -	$1583.35	
Special Apportionment, - - - - - -	480.00	
From Botany Apportionment, - - - - -	346.53	$2409.88

Charge for Bulletin.

VOTED: That no charge be made for the Shade Tree Bulletin, but that distribution of the bulletin outside of the State be restricted to educational institutions or organizations.

Meeting adjourned.

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT

Hotel Bellevue, Boston, January 22, 1917.

PRESENT: Messrs. Preston, Frost, Wilfrid Wheeler, President Butterfield and Director Brooks.

Dr. Brooks reported that Dr. Sturtevant had not accepted the terms offered to him, and had resigned to go with the U.S.D.A. Director Brooks asked whether an effort should be made to secure a successor. It was.

Resignation of Dr. Sturtevant.

VOTED: That no attempt, at the present time, be made to fill the position.

It was

VOTED: That the establishment of a position of assistant in the Veterinary Department for white diarrhea work and teaching combined be confirmed, and that the President and the Director be authorized to find a suitable person for the position.

Assistant in the Veterinary Department.

Dr. Brooks recommended the establishment of the position of Field Pathologist in the Department of Botany, to work for the present on tobacco sickness.

It was

VOTED: To establish the position, (The Trustees having already authorized the apportionment for this work) and to authorize the President and Director to secure a suitable person for the position.

Field Pathologist

The Director reported the appointment of Mr. S.H. DeVault as graduate assistant in the Department of Agricultural Economics.

Appointment, S.H.DeVault

It was

VOTED: To authorize the President and Director, if the state of the budget on July 1 so justifies, to expend not to exceed $250. for the expense of a study of the cost of production and marketing of apples, the work to be done by the Department of Agricultural Economics.

Work in Agricultural Economics

The Director recommended the appointment of a graduate assistant in the Department of Microbiology, to begin July 1, salary $420.

Graduate Assistant in Department of Microbiology

It was

VOTED: To adopt the recommendation.

The Director recommended the employment of an assistant in the Department of Entomology, at a salary not to exceed $1800., to begin September 1, 1917.

Assistant in Department of Entomology.

It was

VOTED: To establish the position and to authorize the President and Director to secure a man for the place.

The Director recommended authority to use not to exceed $300. for clerical work in the cranberry sub-station. It was

Clerical work, Cranberry Sub-Station.

VOTED: To grant such authority.

The Director presented the current apportionment for the fiscal year, the Trustees having voted to confirm the apportionment subject to the approval of the Committee on Experiment Department. It was

Current Apportionment, Exp. Station.

VOTED: To adopt the apportionment as read.

The Director raised the question of employment of graduate assistants on the basis of industrial scholarships, in the case of Pratt's scalicide. It was

Graduate Assistants, on Basis of Industrial Scholarships

VOTED: To refer the matter to the full Board of Trustees.

MINUTES OF THE MEETING OF THE EXPERIMENT STATION COMMITTEE

Bellevue Hotel, Boston, Thursday, Nov. 9, 1916.

PRESENT: Messrs. Preston, Pollard, Frost, Mortimer, Butterfield, and Brooks.

The vote of the Trustees to refer the question of Mr. Sturtevant's salary to the committee was presented, and after discussion it was

VOTED: To authorize the President and the Director of the Experiment Station to offer Mr. Sturtevant a salary of $1800, $1900, and $2,000, respectively, for the ensuing three years, on condition that he would agree to remain for the entire period of three years.

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Hotel Bellevue, Boston, April 14, 1916, at 5:15 p.m.

PRESENT: Messrs.Preston, Frost, Pollard, President Butterfield and Director Brooks.

It was

VOTED: To approve the following reorganization of the department of botany, and recommend its adoption by the Trustees to take effect September 1,1916: Department of Botany, Reorganization

Title to be Department of Botany instead of Department of Vegetable Physiology and Pathology.

The personnel, titles and amount of salaries coming from the Station:

A.Vincent Osmun,M.Sc., Botanist,- Salary all from College.
George E.Stone, Ph.D., Research Physiologist, - Salary $2500. all from Station.
George H. Chapman, M.Sc., Research Physiologist, - Salary $2000., all from Station.
Paul J.Anderson, Ph.D., Associate Plant Pathologist, - one-quarter of salary, $500., from Station.
Orton L. Clark, B.Sc., Assistant Plant Physiologist, - one-half of salary, $840. from Station.

It was

VOTED: To endorse and recommend to the Trustees the terms of employment of Dr. George E.Stone as outlined in the following articles:

Conditions which shall govern Dr. George E. Stone's relations with the institution. Dr.G.E.Stone, Status.

Duties exclusively in the Experiment Station.
Title, Research Physiologist.
Salary, $2500., all from Station,- to become effective September 1, 1916

DUTIES:- Investigation under the direct oversight of the director, but projects for investigation will be submitted to the head of the Department of Botany.

Laboratory: It is understood that Dr. Stone is not to have authority as to the use made of different parts of the laboratory, but that facilities for his work (room, apparatus, reagents, etc.) will be planned for and provided by the director in consultation with and with the sanction of the head of the Department of Botany.

Assistance: -- a. By members of the staff of the Department of Botany.

It is understood that Dr. Stone will have no authority over other members of the staff, but that cooperation on the part of any member of the staff, when desired and possible without interference with other duties, is to be arranged for through the director in consultation with and with the sanction of the head of the Department.

b. By undergraduate or graduate students.

It is understood that Dr. Stone will have no authority to assign students to work under him, but that when the assistance of students is desired, arrangements for it will be made, if feasible, through the director in consultation with and with the sanction of the head of the Department.

c. It is understood that Dr. Stone's authority over either other members of the staff or over students assigned to assist in his investigations will be complete in so far as it relates to their investigational work under him, but that it will extend no further.

Correspondence:--It is to be understood that the head of the Department is to be responsible for all correspondence which involves and represents the institution, but that Dr. Stone, under such arrangements and oversight as may be found desirable, may be called upon and expected to attend to correspondence referring to subjects in which he is the acknowledged best authority in the institution.

Travel:-- The same rules governing travel on business connected with the institution shall apply in the case of Dr. Stone as apply to all other members of the staff of the institution.

Services as Expert:- It is understood that before undertaking to render services as an expert which call for travel, any requests for such services are to be reported to the head of the Department and approved by the director.

It was

VOTED: To recommend to the Finance Committee and to the Trustees the following salary increases:

Experiment Station.

Name:	Department and Rank:	Present Salary:	Increase Rec. by Director:	Increase Rec. by President:	Increase Rec. by F.S.Com.:
J.R. Alcock,	Assistant,	$ 750.	$ 30.	$ 30.	$ 30.
H.L. Allen,	Laboratory Assistant,	890.	10.	10.	10.
C.L. Beals,	Assistant Chemist,	1140.	60.	60.	60.
A.I. Bourne,	Assistant Entomologist,	1260.	60.	60.	60.
W.P. Brooks,	Director and Agriculturist,	3700.			
J.P. Buckley,	Assistant Chemist,	1140.	60.	60.	60.
G.H. Chapman,	Assistant Botanist,	1900.	100.	100.	100.
O.L. Clark,	Assistant Botanist,	1600.	80..	80.	80.
R.L. Coffin,	Assistant,	900.	60.	60.	60.
H.J. Franklin,	In charge of Cranberry Work,	2000.			
E.F. Gaskill,	Assistant Agriculturist,	1590.	90.	90.	90.
H.D. Goodale,	Research Biologist, Poultry Husb.,	2125.	125.	125.	125.
H.D. Haskins,	In charge of Fertilizer Div.,	2375.	125.	125.	125.
E.B. Holland,	Associate Chemist,	2375.	125.	125.	125.
J.T. Howard,	Collector,	1020.	60.	60.	60.
C.P. Jones,	Assistant Chemist,	1180.	120.	120.	120.

Name:	Department and Rank:	Present Salary:	Increase Rec. by Director:	Increase Rec. by President:	Increase Rec. by E.S.Com.:
J.B.Lentz,	Assistant in Vet. Science,	$1200.			
F.W. Morse,	Research Chemist,	2375.	$ 125.	$ 125.	$ 125.
J.K. Shaw,	Research Pomologist,	1900.	100.	200.	200.
R.W. Ruprecht,	Assistant Chemist,	1080.	120.	120.	120.
P.H. Smith,	In charge of Feed Division,	2125.	125.	125.	125.
A.P. Sturtevant,	Assistant in Vet. Science,	1200.	180.	180.	180.
F.H.VanSuchtelen,	Research Microbiologist,	---	100.	100.	100.
L.S. Walker,	Assistant Chemist,	1560.	60.	60.	60.

It was

Industrial Tests.

VOTED: To recommend to the Trustees the indefinite continuance of the De Laval Industrial Test on the basis of arrangements approved in 1915.

It was

Amendment to Feed Law.

VOTED: To recommend to the Trustees that the Director be authorized to introduce into the Legislature of 1917 an amendment to the so-called Feed Law, changing the date from September 1 to January 1.

It was

Purchase of Potash.

VOTED: To authorize the Director to obtain potash for experimental work for the season of 1916 in accordance with his best judgment.

It was

Pruning Project.

VOTED: To approve the project for pruning in accordance with the recommendation of the President and Director.

Concord Sub-Station

The Director reported that the experimental work at the Concord asparagus sub-station had been terminated December 31, 1915.

It was

Prosecution of Fertilizer Company.

VOTED: That the President, Director, and Dr. Lindsey be empowered to prosecute at their discretion certain fertilizer companies for selling fertilizer not up to their guarantee.

MINUTES OF TRUSTEES' COMMITTEE ON EXPERIMENT DEPARTMENT.

Hotel Bellevue, Boston, January 6,1916, at 5:00 p.m.

PRESENT: Messrs. Preston, Frost, Mortimer, President Butterfield, and Director Brooks.

Executive Orders were confirmed covering the rental of land for 1915 for the poultry department, and the undertaking of investigations in the control of the red spider.

The following resignations were accepted and placed on file: Resignations.

Mr. N.H.Borden, Assistant Chemist,to take effect Dec. 10, 1915.
Mr. W. S. Frost, Assistant Chemist,to take effect Oct.31,1915.
Miss Beryl Paige,Assistant in Vet.Science,to take effect Jan. 31, 1916.

The following appointments were confirmed: Appointments.

Mr. Charles W. Davis, Assistant Chemist, to take effect December 1,1915, salary $840.
Mr. George M. Hall, Assistant in Veterinary Science, to take effect February 1,1916, salary $960.

On recommendation of Director Brooks it was

VOTED: To recommend to the Trustees that Dr. G.E.Stone be continued on the payroll of the institution for a period of one year from October 1, 1915; that during this period his salary be $2500., $2000. of which shall be paid from Experiment Station funds; and that he work on research projects under the direction of Director Brooks. G.E.Stone, Status.

VOTED: To recommend to the Trustees the employment of an assistant chemist to carry on research work in the nutrition of horses, this engagement to be made September 1, 1916, provided funds are on that date available in the department of chemistry of the Experiment Station. Assistant Chemist.

Cow Testing.

VOTED: To rescind the former vote of this Committee authorizing the transfer of the cow testing work to the department of animal husbandry of the College.

Assistant in Poultry Husbandry.

VOTED: To recommend to the Trustees that if the appropriation asked for by the poultrymen is secured, the Experiment Station employ an additional assistant for this work.

Seed Law.

VOTED: That the draft of the proposed seed law submitted by Dr.Brooks be referred to the Trustees with the endorsement of this Committee.

VOTED: To recommend to the Finance Committee and to the Trustees the budget and apportionment of Experiment Station funds for the year ending November 30, 1916, as presented by the Director.

Meeting adjourned.

MASSACHUSETTS AGRICULTURAL COLLEGE

M I N U T E S

TRUSTEES' COMMITTEE

O N

E X T E N S I O N S E R V I C E

INDEX OF COMMITTEE MEETINGS

TRUSTEES' COMMITTEE ON EXTENSION SERVICE

Date	Place	Notices sent	Minutes	Remarks
1913 Jan. 23	Hotel Bellevue, Boston	Jan. 15	O. K.	
March 5	Hotel Bellevue, Boston	Feb. 28	O. K.	
May 19,	Amherst House, Amherst	Sent by Prof. Hurd	O. K.	
June 16	M. A. C. Amherst	June 10	O. K.	
Sept. 25	Hotel Bellevue, Boston	Sept. 20	O. K.	
1914 Jan. 8	Hotel Bellevue, Boston	Dec. 31	O. K.	
Jan. 19	Hotel Bellevue, Boston	Jan. 13	O. K.	Joint mtg. with Com. on Finance
June 4.	Hotel Bellevue, Boston	May 28	O. K.	
1915 Jan. 7	Hotel Bellevue, Boston	Dec. 31	O. K.	
Feb. 6	State House and Parker House	Jan. 18	O. K.	
March 9	Hotel Bellevue	March 3	O. K.	
March 16	Hotel Bellevue	March 12	O. K.	
June 2	Hotel Bellevue	May	O. K.	

MINUTES OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE

Bellevue Hotel, Boston, January 23, 1913, 4 P.M.

PRESENT: Messrs. Howe, Ellis, Ellsworth, Ward, and President Butterfield. Director Hurd was also present.

Director Hurd made quite a full report of a trip of inspection which he took among the western agricultural colleges in the late autumn, studying methods of extension work. He also gave a report of the work now being carried on in this state. The Director presented various projects for additions to the Extension Service, all of which were approved by the following votes: --

Report of Director

It was

VOTED: To authorize the Director of the Extension Service to purchase an automobile truck and to carry out a project for "auto-demonstrations" as outlined in his memorandum dated January 8.

Automobile Truck

It was

VOTED: To approve the project of the Director of the Extension Service for the development of extension work in home economics and domestic science, in accordance with his memorandum dated January 8.

Work in Home Economics

It was

VOTED: To approve the project for extension service in civic improvement as outlined in a memorandum of the Director of the Extension Service dated January 8.

Work in Civic Improvement

Director Hurd presented the budget of proposed expenditures for the current fiscal year. Comparisons were made with the expenditures for the past fiscal year, and after discussion it was

Budget for 1913

VOTED: To approve the budget as read and to make the apportionment therein described for the financial apportionment for the current fiscal year.

It was

VOTED: To authorize the President of the College to employ at his discretion, persons suitable to carry on the work in auto-demonstrations, in home economics, and in civic improvement.

Director Hurd outlined a proposed plan for cooperating with the United States Department of Agriculture, Bureau of Farm Management, in developing demonstrations and other forms of extension service cooperatively in this state. After discussion it was

Cooperation with other agencies

VOTED: To approve the general plan, details of the agreement between the United States Department of Agriculture and the College to be approved by a special committee consisting of Chairman Howe, President Butterfield, and Director Hurd.

The Director presented a statement concerning cooperation with the State Board of Education in the matter of appointing principals of agricultural high schools or departments as local or district extension service agents. After discussion it was

VOTED: To request Doctor Snedden, Commissioner of Education, and Mr. Stimson to confer with the Committee in regard to the

matter of cooperation between the Board of Education and the College in extension service.

Director Hurd presented a project for coopera- Northampton tion with the Northampton Board of Trade, stating Board of that the vote of that Board was not in line with Trade what seemed to be feasible from the college point of view, and it was

VOTED: That for the present cooperation with the Northampton Board of Trade in extension service seems inexpedient.

Director Hurd presented a memorandum relative Vacation to the amount of vacation due Extension Service for employees. It was Extension

VOTED: That Extension Service employees should Service be considered as entitled to a vacation of one month each year. Employees

Director Hurd presented a project covering details of arrangements to be made with various Fair fair societies desiring to entertain the college Exhibits educational exhibit at their fairs during the coming autumn. It was

VOTED: To approve the plans outlined by Director Hurd for fair exhibits, leaving the question of the purchase of exhibition-tent to the Director of the Extension Service with power.

Director Hurd raised a question concerning uniform rules governing the employment of college men who serve as judges at fairs, and also in regard to the question of advice to individual land owners. No action was taken.

Director Hurd presented a request from the Boston State Hospital for assistance in outlining a plan of management for the farm belonging to the hospital. It was

Boston State Hospital

VOTED: To authorize the Director of the Extension Service to cooperate with the Boston State Hospital in outlining a method of management for the farm belonging to the hospital.

The meeting adjourned.

MINUTES OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE

Boston, Mass., March 5, 1913, at 4 p.m.

PRESENT: Messrs. Howe, Ellis, Ellsworth, Ward, and President Butterfield. There were also present Doctor Snedden, Professor Hurd, and Mr. Stimson.

The purpose of the meeting was to confer with Doctor Snedden and Mr. Stimson with reference to the terms under which the Board of Education and the College might cooperate in the extension work of agricultural high schools and agricultural departments of high schools in communities in which those schools or departments are located. Mr. Stimson explained the plan that he has in mind, and Professor Hurd outlined proposed terms. After long discussion, it was

Cooperation with State Board of Education

VOTED: To ask Professor Hurd to report to the Committee in writing a memorandum of agreement, satisfactory both to the Board of Education and to himself as Director, that will indicate the terms of the desired cooperation in the matter of extension service.

MINUTES OF THE TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Amherst House, Amherst, Mass., May 19, 1913, at 6:00 p.m.

PRESENT: Messrs. Howe, Wilfrid Wheeler, Frost, Ward, and Acting-President Lewis; Director Hurd and Treasurer Kenney were also present.

Director Hurd reported the engagemet of the following persons for positions formerly established by the Committee on Extension Service:

P. H. Elwood

1. P. H. Elwood, Extension Instructor in Civic Improvement; salary $1500 per year; to take effect September 1,1913.

Miss Laura Comstock.

2. Miss Laura Comstock, Extension Professor of Home Economics; salary $2000 a year; to take effect July 1, 1913.

The director also reported that by authority of this Committee an automobile truck for auto demonstration work had been purchased; and on his recommendation, it was

A. F. McDougall.

VOTED: To elect Mr. A. F. McDougall of the present senior class at the college, to the position of demonstrator in charge of the automobile truck at a salary of $1000 a year, to take effect July 1, 1913.

The director also made the following report relative to projects which had been referred to him and the President for final settlement:

Cooperation with other agencies.

1. Cooperation with the United States Department of Agriculture.
2. Cooperation with the State Board of Education in Utilizing Teachers of Agriculture in High Schools as agricultural advisers.
3. That the County advisory work in Hampden County had been organized with a general secretary and two experts in charge. The College, through its extension service, contributes $1000 a year toward the salary of the general secretary of this enterprise.

The director explained that Mr. Arthur T. Dailey, now in charge of the correspondence courses, will resign at the end of the current college year.

On his recommendation, it was

E.H.Forbush

VOTED: To employ Mr. E. H. Forbush, now employed by the Secretary of the State Board of Agriculture, as supervisor of correspondence courses at a salary of $1600 per year, the same to take effect September 1, 1913.

The following schedule of salary increases in the Extension Service was presented, the schedule having been approved by President Butterfield:

Salary Increases.

Earnest D. Waid,	from $2100	to $2200.
Orion A. Morton,	from $2160	to $2300.
George F. Story,	from $1650	to $1800.
Ralph W. Rees,	from $1500	to $1800.
Ezra L. Morgan,	from $2000	to $2100.
Herbert J. Baker,	from $1400	to $1600. ($800 of this to be paid by theCollege, and $800 by the Office of Farm Management, U. S. D. A.)

It was

VOTED: To recommend to the Trustees the salary increases as above stated.

Clerks: Salaries, Promotions

Director Hurd also recommended that Miss Mabel Case be made Secretary to theExtension Service at a salary of $1000 a year; that the salary of Miss Hannah Griffin be increased to $720, and that Miss Cora Grover be given a permanent position as stenographer in the Extension Service at a salary of $720 per year. In accordance with the recommendation of the President, it was

VOTED: To refer these changes in salaries of clerical assistants to the Committee on Finance, but that this Committee endorses in general the principles involved in the proposed promotions.

New Positions.

VOTED: To authorize the appointment of a permanent clerk at an annual salary of $600 to assist in conducting the correspondence courses.

VOTED: To authorize the employment of an additional clerk in the Extension Service beginning September 1, 1913, at an annual salary of $600.

Director Hurd explained in brief the position in the United States Department of Agriculture which has been offered him.

After careful consideration, and on motion of Mr. Frost, it was

VOTED: To ask Professor Hurd to allow the Trustees until the regular June meeting before taking final action on this matter.

Report of Extension Workers.

The following appeared before the Committee, and briefly explained certain phases of Extension Service in which they are engaged:

Prof. J. C. Graham,	Poultry Husbandry,
Mr. E. L. Morgan,	Rural Community Organization,
Mr. E. D. Waid,	Extension schools, fair exhibits, etc.
Mr. H. J. Baker,	Farm Management,
Mr. O. A. Morton,	Boys' and Girls' Clubs,
Prof. W. R. Hart,	Boys' and Girls' Clubs,
Mr. R. W. Rees,	Pomology,
Mr. G. F. Story,	Dairying, and Animal Husbandry,
Prof. W.P.B. Lockwood,	Dairying,
Director W. D. Hurd,	Short Courses, etc.

MINUTES OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE

President's Office, Amherst, Mass., June 16, 1913, at 2 p.m.

PRESENT: Messrs. Howe, Ellis, Wilfrid Wheeler, Ward and Acting President Lewis.

The Committee met for the further consideration of the situation relative to Professor Hurd.

Mr. Howe presented a letter from President Butterfield relative to the conditions under which Professor Hurd might be retained.

After discussion, Acting President Lewis was requested to confer with Professor Hurd and express to him the sentiment of the Committee to the effect that they cannot offer him for next year more than $4000 in salary, and they do not feel that in the near future it will be possible to secure much increase in the state appropriation for extension service.

After Acting President Lewis had conferred with Professor Hurd, and after further discussion, it was

VOTED: To recommend to the Trustees that beginning September 1, 1913, the salary of Professor Hurd be $4000 per year, and further, that at a subsequent date, if certain government funds now anticipated are available, Professor Hurd may receive an additional sum of $500 per year from the government, provided the services rendered in this capacity do not interfere with his work for the college. Salary of Prof. Hurd.

MINUTES OF THE TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, September 25,1913, at 6:30 p.m.

PRESENT: MESSRS. Howe, Ellis, President Butterfield and Acting President Lewis; Director Hurd was also present.

It was

VOTED: To lay on the table the request of Director Hurd for a further increase in the salaries of Misses Grover and Griffin. Salaries of Misses Grover and Griffin.

It was

VOTED: To recommend to the Committee on Course of Study and Faculty that employees of the extension service of the grade of instructor and professor be members of the college faculty without voting power. Extension Service Employees.

Further, that this Committee suggests that such action be taken relative to the employees of the experiment station.

It was

VOTED: That the following salary increases be made, to take effect September 1, 1913.

Name.	Present Salary.	Increase Proposed.	Total Proposed.	
Waid, E. D.,	$2100.	$100.	$2200.	Salary Increases
Morton, O. A.,	2160.	140.	2300.	
Story, G. F.,	1650.	150.	1800.	
Rees, R. W.,	1500.	300.	1800.	
Morgan, E. L.,	2000.	100.	2100.	
Baker, H. J.,	1400.	200.	1600.*	

*$800 of this to be paid by the College, and $800 by the Office of Farm Management, U.S.D.A.

VOTED: That beginning September 1, 1913, the entire salary of Mr. A. A. Brown, instructor in poultry husbandry, be paid from Instruction funds, and that $800 of the salary of Professor J. C.Graham be paid from funds of Extension Service.

VOTED: To leave to the discretion of the President the authorization of travel of extension service employees in attendance at scientific meetings representing the work in which they are now engaged. Travel, Extension Employees.

It was

VOTED: To recommend to the Trustees:

That the short courses be considered as a part of the regular teaching of the various departments and that the responsibility for the quality of instruction rest entirely with the department.

That all permanent equipment used in the teaching of short course students be furnished by the departments concerned. Organization of Short Courses.

That, for convenience of administration the organization and development of short courses be placed in the hands of the Director of the Extension Service.

MINUTES OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, January 8,1914, at 1:30 p.m.

PRESENT: Messrs. Howe, Frost, and Wilfrid Wheeler; Director Hurd and Treasurer Kenney were also present.

Inasmuch as there was not a full attendance of the members of this committee, those present did not pass any official votes, but expressed themselves as favoring the following propositions:

I. Titles for Extension Service employees:

William D. Hurd, - - Director of the Extension Service.

Earnest D. Waid, - - Assistant Director of the Extension Service.

Alexander E. Cance, - Supervisor of Agricultural Surveys.

Orion A. Morton, - - Extension Professor of Agricultural Education.

Ezra L. Morgan, - - Extension Professor of Community Organization.

Laura Comstock, - - Extension Professor of Home Economics.

R. H. Ferguson, - -- Extension Professor of Agricultural Economics.

Ralph W. Rees, - - Extension Instructor in Pomology.

George F. E. Story, - Extension Instructor in Animal Husbandry.

Herbert J. Baker, - Extension Instructor in Farm Management.

Erwin H. Forbush, - Extension Instructor in charge of Correspondence and Lecture Courses

P. H. Elwood, Jr., -- Extension Instructor in Civic Improvement.

Allister F.McDougall, Extension Instructor in charge of Demonstration Auto Truck.

Ethel H. Nash, - - Extension Instructor in Agricultural Education.

2. To endorse the engagement of Miss Ethel H. Nash as Extension Instructor in Agricultural Education at a salary of $1000 per year, same to take effect January 1, 1914.

3. To endorse the engagement of Mr. R. H. Ferguson as Extension Professor of Agricultural Economics at a salary of $2000 per year, same to take effect January 5, 1914.

4. To endorse the proposed plan of the Extension Service contributing at the rate of $1000 per year for one year to the work of the Farm Bureau of Worcester County.

5. To endorse the proposed apportionment of funds for the present fiscal year, as submitted by the Director.

6. To recommend to the Trustees that the Director print the biennial report of the Extension Service for the period ending December 31,1913.

MINUTES OF TRUSTEES' COMMITTEES ON FINANCE AND EXTENSION SERVICE.

Hotel Bellevue, Boston, January 19, 1914, at 4:30 p.m.

PRESENT: Messrs. Gleason, Howe, Bowditch, Ellis, Frost, Gerrett, Hosmer, Ward, Wilfrid Wheeler, and Acting President Lewis; Treasurer Kenney was also present.

Mr. Howe presided.

It was

VOTED: That before new projects are undertaken or present work extended in the Extension Service, and adjustment of salary shall be made in cases where regular instructors of the college are doing extension work. Extension Service, New Projects.

It was

VOTED: To leave the consideration of the following matters until the budget of the Extension Service for the ensuing year shall be passed upon:

1. The transfer of a portion of the salary of the Treasurer to Extension Service funds.

2. The endorsement of the engagement of Miss Ethel H. Nash.

3. The endorsement of the engagement of Mr. R. H. Ferguson.

4. The endorsement of the plan to contribute $1000 per year for one year to the work of the Farm Bureau of Worcester County.

5. The authorization of the printing of the biennial report of the Extension Service.

Director Hurd appeared before the Committees and presented his recommendation for the Extension Service budget for the ensuing year. It was

VOTED: To accept the budget as presented by the Director. Budget, Extension Service.

It was

VOTED: To lay on the table until the June meeting of the Trustees the recommendation that from December 1, 1913 $500 of the salary of Treasurer Kenney be paid from funds of the Extension Service. Salary of Treasurer.

It was

VOTED: To endorse the engagement of Miss Ethel H. Nash as Extension Instructor in Agricultural Education at a salary of $1000 per year, same to take effect January 1, 1914. Appointment of Miss Nash.

It was

VOTED: To endorse the engagement of Mr. R.H. Ferguson as Extension Professor of Agricultural Economics at a salary of $2000 per year, same to take effect January 5, 1914. Appointment of Mr. R.H. Ferguson.

It was

VOTED: To lay on the table the recommendation that the Extension Service contribute at the rate of $1000 per year for one year to the work of the Farm Bureau of Worcester County. Worcester County Farm Bureau.

It was

VOTED: To lay on the table the recommendation that Miss Mooney, as stenographer in the department of poultry husbandry, be paid from funds of the Extension Service. Salary of Miss Mooney.

MINUTES OF COMMITTEE ON EXTENSION SERVICE.

Bellevue Hotel, Boston, June 4,1914, at 12:30 p.m.

PRESENT: Messrs. Howe, Ellis, Ward, and President Butterfield; also Director Hurd.

The Director presented the following projects to be carried on under the provisions of the Lever Bill.

Project I.

For Instructor to carry on Cooperative Demonstration Work in Home Economics.

Project II.

Instructor in Farm Management Field Studies and Demonstrations, cooperating with Office of Farm Management, United States Department of Agriculture.

Project III.

Cooperative Demonstration Work in Home Economics to be carried on by Miss Comstock.

Projects

Project IV.

for

Cooperative Demonstration Work (Auto Demonstration Truck) by A. F. McDougall.

Smith

Project V.

Printing Bulletins and Circulars, 5% allowed by Lever Bill.

Lever

Project VI.

Cooperative Demonstration Work in Orcharding by Mr.R.W.Rees.

Funds.

Project VII.

Cooperative Demonstration Work in Animal Husbandry, by Mr. George F. Story.

Project VIII.

Cooperative Demonstration Work in Dairying by Prof. W.P.B. Lockwood.

Project IX.

Cooperative Demonstration Work, Boys' and Girls' Clubs, cooperating with work in charge of Mr. O. H. Benson.

The Director recommended that

The United States Department of Agriculture be requested to approve this series of projects for Extension Service under the new Smith-Lever Act.

After discussion it was

VOTED: To approve the recommendation of the Director.

The Director presented a statement of desired increases in the salaries of the Extension Service staff. It was

VOTED: To recommend to the Finance Committee and to the Trustees the adoption of this schedule of proposed salaries, except that of Miss Case; the question of an increase in Miss Case's salary to be referred to the Trustees without recommendation. Salary Increases.

RECOMMENDATION FROM EXTENSION SERVICE COMMITTEE
RELATIVE TO SALARY INCREASES TO TAKE EFFECT SEPT.1,1914.

Name.	Present Salary.	Proposed Increase.	Salary 1915.
E. D. Waid,	$2200.	$100.	$2300.
H. J. Baker,	1600.	200.	1800.
Laura Comstock,	2000.	100.	2100.
P. H. Elwood, Jr.,	1500.	150.	1650.
E.H.Forbush,	1600.	200.	1800.
A. F. McDougall,	1000.	400.	1400.
E.L. Morgan,	2100.	100.	2200.
O.A. Morton,	2300.	100.	2400.
Ralph W. Rees,	1800.	200.	2000.
George F. Story,	1800.	200.	2000.
		TOTAL - - -	$1750.

The need of extra stenographers in the Extension Service was discussed, and it became evident that while the increase in stenographers was probably needed, such increase could not be

given without encroaching on the reserve balance of the Extension Service apportionment. The President suggested, however, that two extra stenographers be employed and that the whole matter be referred to the Board of Trustees without recommendation. It was

Stenographic Assistance.

VOTED: To refer the matter to the Trustees.

The Director recommended that Mr. H. J. Baker be transferred to the position of Instructor in Farm Management Field Studies and Demonstration and Supervisor of Cooperative work of Teachers of Agricultural County Agents. It was

Transfer of H.J.Baker.

VOTED: To accept the recommendation of the Director.

It was

VOTED: To add the following title to that of the Director of the Extension Service "and Supervisor of Short Courses."

Title of W.D.Hurd.

A letter was read from the Worcester County Improvement League and Alfalfa Club petitioning the Board of Trustees for an appropriation to assist in the work of the League. It was

Worcester County Improvement League.

VOTED: To authorize the Director to convey to the officers of the Worcester County Improvement League a statement of the financial situation which makes it impossible at this time to grant the desired assistance.

On recommendation of the Director, it was

VOTED: To recommend to the full Board of Trustees the following titles for the extension service staff:

TITLES FOR THE EXTENSION SERVICE STAFF.

William D. Hurd, ...Director of the Extension Service and Supervisor of Short Courses.

Ernest D. Waid,..... Assistant Director of the Extension Service.

Alexander E. Cance, ...Supervisor of Agricultural Surveys,

Orion A. Morton,.....Extension Professor of Agricultural Education.

Ethel H. Nash,.....Extension Instructor in Agricultural Education.

Laura Comstock, ...Extension Professor of Home Economics.

George F. Story, ...Extension Instructor in Animal Husbandry, Titles.

Ralph W. Rees, ...Extension Instructor in Pomology.

E. L. Morgan, ...Extension Professor of Community Planning.

Herbert J. Baker,.....Extension Instructor in Farm Management.

Erwin H. Forbush, ...Supervisor of Correspondence Courses.

P. H. Elwood, Jr.....Extension Instructor in Civic Improvement.

Allister F. McDougall,.....Extension Instructor in charge of Demonstration Auto Truck.

R. H. Ferguson,.....Extension Professor of Agricultural Economics.

MINUTES OF MEETING OF COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, January 7, 1915, at 9:30 a.m.

PRESENT: Messrs. Howe, Frost, Ellis, Mortimer, Wilfrid Wheeler, and President Butterfield. Director Hurd was also present.

A delegation of men representing the Boston Market Gardeners' Association appeared before the Committee and stated that in their judgment the College is not assisting the market gardeners of the State in a manner satisfactory to those engaged in this industry; they urged that the College develop a department of Market Gardening which will be of larger service in solving the problems confronting the growers; it was suggested that there be developed a better teaching department at the College, and that more work be done by the Extension Service and the Experiment Station, and that it would be desirable to establish headquarters for such work in the vicinity of Boston.

Department of Market Gardening.

It was

VOTED: To authorize the Director to publish not less than 2000 copies of a comprehensive report covering the activities of the Extension Service.

Report of Extension Service.

The Director presented the annual budget and apportionment for 1914-1915.

It was

VOTED: That at an early date the President should arrange a meeting of this Committee for the purpose of hearing reports from the various men engaged in Extension work.

VOTED: To recommend to the Trustees the adoption of the apportionment, as presented for the year 1914-1915, for Extension Service work.

VOTED: To recommend to the Trustees the adoption of the apportionment, as presented for the year 1914-1915, for Short Course work.

On recommendation of the Director it was

H. J. Baker: Resignation of

VOTED: That in case Mr. H. J. Baker resigns as Assistant State Leader and Extension Instructor in Farm Management, Mr. B.W. Ellis be elected to that position at a salary of $1600. per year.

B.W.Ellis.

VOTED: That the President be authorized to fill the position now held by Mr. B. W. Ellis, provided the vacancy occurs, at a salary not to exceed $1400. per year.

Auto Demonstration Truck.

VOTED: That in case a vacancy occurs in the position of Extension Instructor in Charge of Auto Truck Demonstrations, the President be authorized to fill such a vacancy at a salary not to exceed $1400. per year.

VOTED: To authorize the Director to dispose of the automobile truck now used and to purchase a Ford machine in its place.

On motion of Mr. Frost, it was

Interest on Extension Service Balance.

VOTED: To refer to the Finance Committee the question of crediting to the Extension Service the interest derived from the large balance of Extension Service funds, with the recommendation that such credit be allowed.

Secretary of the Extension Service.

VOTED: To refer to the Finance Committee the question of employing a man as Secretary of the Extension Service, with the statement that this Committee recognizes the need of such an officer.

VOTED: That the project for salary adjustment between the Extension Service and other funds, be considered at the next meeting of this Committee; also that the question of securing further funds for Extension work be referred to that meeting. Salary Adjustment.

VOTED: That the Trustees be requested, at their meeting January 8th, to give Director Hurd a hearing on his proposed changes in the law relative to County Bureau organizations.

MINUTES OF THE MEETING OF THE TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Room 431, State House, Boston, February 6, 1915, at 9:30 a.m.

The Extension Service Committee, together with other members of the Board of Trustees, met for the purpose of hearing reports of the various lines of work conducted by the Extension Service employees. There were present as members of the Extension Service Committee:

Messrs. Howe, Dewey,Ellis, Gannon, Wilfrid Wheeler, and President Butterfield.

In addition, the following Trustees were present:

Messrs. Bowditch, Gerrett, Gleason and Hosmer.

The following members of the Extension Service staff appeared and made brief verbal reports of their work:

Director William D. Hurd, Mr. Ralph W. Rees, Prof. Fred C. Sears, Mr. George F. Story, Prof. J.A.McLean, Prof. W.P.B. Lockwood, Mr. E. H. Forbush, Mr. E.D.Waid, Miss Laura Comstock, Miss Hopkins, Mr.H.F.Tompson, Prof. F.A.Waugh, Mr. P.H.Elwood, Prof.E.L.Morgan, Prof. O.A. Morton, Miss Nash, Mr. H.J.Baker, Mr. B.W. Ellis,Prof. J.C.Graham, Mr. A.F.McDougall, Mr. R.H.Ferguson, and Dr. A.E.Cance.

Some of the above stated that additional assistance was needed in order to more adequately meet the demands made upon their respective departments by the people of the state. The departments, in which such additional assistance is needed, are Pomology, Market Gardening,Boys' and Girls' Clubs, Poultry Husbandry and Agricultural Economics.

Executive Session.

Parker House, Boston, Mass., Feb.6,1915, at 3:15 p.m.

PRESENT: Messrs. Howe, Dewey, Gannon, Wilfrid Wheeler and President Butterfield.

It was

VOTED: To concur in the action taken by the Trustees' Committee on Course of Study and Faculty, relative to the employment of Mr.H.F. Tompson for one year beginning March 15, 1915, as head of the department of Market Gardening, at a salary of $3500.; time and salary to be divided between the College and Extension Service.

It was

VOTED: To leave the question of the division of the salary and time of Mr. H.F.Tompson to the Chairman of this Committee, the President and the Director of the Extension Service with power.

Employment of H. F. Tompson.

On motion of Dr. Dewey, it was

VOTED: That the question of continuing the work in the Extension Service of civic improvement and community organization be considered at a meeting of this Committee to be held in Boston Tuesday, March 9,1915.

Civic Improvement & Community Organization.

It was

VOTED: To rescind the vote of this Committee passed January 7,1915, whereby the Director was authorized to purchase a Ford automobile to replace the Chase truck now owned.

Auto-Truck.

It was

VOTED: That the Director be authorized to sell the Chase truck and to use the money thus obtained for such other projects as may be hereafter authorized.

It was

Auto-Truck.

VOTED: That the funds now devoted to the operation of the auto demonstration truck and outfit, together with the salary of the instructor, be used in such a manner as may later be determined upon.

It was

VOTED: That Mr. B.W. Ellis be relieved from duties as Farm Management Demonstrator, and as Assistant State Leader, to devote his entire time to the supervisory work with County agents and teachers of agriculture, and that the Director be authorized to employ such additional clerical assistance as may be found necessary on account of this adjustment. B.W. Ellis.

It was

VOTED: That this Committee approve the title of "State Leader" for Professor William D. Hurd, under authority of the U.S.D.A. "State Leader"

It was

VOTED: To accept the resignation of Mr. A.F. McDougall as instructor in charge of the auto demonstration outfit, the same having taken effect January 31,1915. A.F. McDougall.

It was

VOTED: To approve the appointment of Mr. Wesley H. Bronson, as Instructor in Farm Management Demonstrations, at a salary of $1400. per year, the same having taken effect February 1, 1915. W.H. Bronson.

The President reported the employment of Mr. Gardner Boyd from funds obtained from the U.S.D.A., as General Assistant to Professor Morton, in the supervision of Boys' and Girls' Club work. Gardner Boyd.

The President also reported the employment of Mr. Raymond L. Whitney for Farm Survey work on the onion and tobacco farms of the Connecticut Valley, his salary and expenses to be paid from funds secured from the U.S.D.A. R.L. Whitney.

Meeting adjourned.

MINUTES OF THE MEETING OF THE TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Boston, Mass., March 9th, 1915, at 5:00 p.m.

PRESENT: Messrs. Howe, Dewey, Ellis, Frost, Gannon, Wilfrid Wheeler, President Butterfield; Director Hurd was also present.

The Director presented a statement relative to the use of automobiles in the Extension Service, and reimbursement therefor, and made certain recommendations.

It was

VOTED: To authorize an allowance of seven cents per mile for the use of automobiles in the Extension Service, in the case of machines owned by a member of the staff, for service outside of the town of Amherst, and under the direction of the Director, pending some investigation of practices elsewhere and a possible decision concerning a general policy on the part of the Trustees.

Allowance for Automobiles.

The Director recommended certain changes in the apportionment and after discussion, it was

VOTED: To make the following changes in the apportionment to the Extension Service for the current fiscal year:

Changes in Apportionment:

Additions:

Assistant State Leader:

Salary, - - - - -	$420.
Travel, - - - - -	760.
Clerical Help, - -	225.
	$1405.

Market Gardening: (Until July 1)

Salary, - - - - -	$ 340.27
Travel, - - - - -	125.00
	$ 465.27

Changes;

Farm Management: (Bronson)

Travel, - - - - - -	$760.
Equipment, - - - - -	100.
Supplies, - - - - -	100.
	$960.

Community Planning:

Salary, - - - - -	-$2100.
Travel, - - - - -	500.
Clerical, - - - - -	225.
Equipment, - - - - -	50.
Supplies, - - - -	50.
	$2925.

Equipment has been divided under each classification:

½ Equipment,
½ Supplies.

The President reported that the United States Department of Agriculture will pay Mr. Harold F. Tompson $1,200. per year for full time for market gardening work, or at the rate of $400. for one-third time, and Mr. Tompson's monthly salary of $291.66 will be divided as follows during the period March 15 to July 1:

Salary of H.F. Tompson.

U.S. Department of Agriculture,	$33.33
Extension Service, - - - - -	97.22
Instruction, - - - - - - -	161.11

The President reported the engagement of Miss Lillian Hadfield as stenographer at the rate of $600. a year, the same having taken effect March 3rd.

Appointment of Lillian Hadfield.

Dr. Pierce, of the State Department of Animal Industry, appeared before the Committee and advised that the Farmers' Week program be cancelled. It was

VOTED: To cancel Farmers' Week this year. Farmers' Week.

The Director presented several projects for the expenditure of funds released by the decision to do away with the automobile truck. After discussion it was

VOTED: To adopt the project for additional help in Extension work in Poultry keeping. Work in Poultry Husbandry.

It was

VOTED; That the Director be authorized to expend from the Smith-Lever funds, during the year beginning July 1, not to exceed $600. for employing teachers of agriculture in the high schools to do College extension work in their respective towns. Agricultural Teachers in High Schools

It was

VOTED: To apply $400. of the Smith-Lever fund for the next year beginning July 1 to the salary of Mr. Boston in Barnstable County work. Barnstable County.

It was

VOTED: To recommend to the Finance Committee that in the case of certain College teachers the following payments be made from the Extension Service funds, beginning September 1. In cases where the time given to Extension Service is less than 5 per cent, no recommendations have been made. Salaries.

J. A. Foord,	$150.
F. A. Waugh,	350.
F. C. Sears,	500.
B. N. Gates,	225.
A. E. Cance,	450.
W. R. Hart,	350.

It was

VOTED: To recommend to the Finance Committee that salaries of the Extension Service staff be increased as follows, the same to take effect September 1st:

E. D. Waid,	$100.
O. A. Morton,	100.
E. L. Morgan,	200.
Miss Laura Comstock,	200.
G. F. E. Story,	100.
R. W. Rees,	100.
B. W. Ellis,	150.
P. H. Elwood, Jr.,	100.
E. A. Forbush,	100.
W.P.B. Lockwood,	100.
Miss Ethel H. Nash,	200.
Miss Harriet Hopkins,	200.
W. A. Bronson,	150.

Salary Increases.

MINUTES OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Boston, Mass., March 13, 1915.

PRESENT: Messrs. Howe, Dewey, Ellis, Gannon, Wilfrid Wheeler, President Butterfield; Director Hurd was also present.

Director Hurd reported on relations of the College to county farm bureau work in certain cases. It was agreed, without vote, that the Director should present at some future meeting of the Committee a general statement of the relationships that should exist between the College and these bureaus. Farm Bureaus.

The motion of Mr. Wilfrid Wheeler to terminate the extension service in Civic Betterment and Community Organization was taken from the table and discussed at length. It was Work in Civic Betterment and Community Organization.

VOTED: To refer the whole matter to the Trustees without recommendation and the President was requested to prepare a statement or outline of the arguments on both sides of the question.

President Butterfield reported the status of the movement to organize a voluntary committee on Agricultural Development, and recommended that the College participate. It was

VOTED: To endorse the plan and to authorize the President to represent the College on the Massachusetts Agricultural Development Committee, in case such a committee is formed, until the next Trustee meeting. Massachusetts Agricultural Development Committee.

On recommendation of the President it was

VOTED: That Prof. Morgan be authorized, under the supervision of the Director and the President, to give such part of his time as may be necessary to assisting such committees or groups as may be cooperating with the college in helping to unify the agricultural interests of Massachusetts, - local, county, and state. Work of E.L. Morgan.

The President presented a recommendation concerning a leave of absence for Director Hurd, and it was

VOTED: To grant a leave of absence to Director Hurd, with pay, from August 1 to approximately October 15, with the understanding that if at the end of that time his health will not permit the resumption of his duties, the President is authorized to extend the leave of absence to approximately April 1, 1916. Leave of Absence, Prof.W.D. Hurd.

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, June 2, 1915, at 1:00 p.m.

PRESENT: Messrs. Howe, Frost, Dewey, Gannon, Wilfrid Wheeler, and President Butterfield; Director Hurd was also present until the Committee met in special executive session.

Director Hurd presented the apportionment of funds to be spent on Smith-Lever projects for the year beginning July 1, 1915.

It was

Appointment of A. G. Lunn.

VOTED: To recommend to the Trustees the employment of Mr.Alfred G. Lunn, as Extension Instructor in Poultry Husbandry, at a salary of $1800. per year, the same to take effect approximately July 20, 1915.

It was

Smith-Lever Projects.

VOTED: To approve the accompanying list of projects for the Smith-Lever funds, and to recommend their adoption by the Trustees:

Smith-Lever Fund Apportionment.
July 1,1915 to July 1,1916.

Amount Available $12,922.00

Project:			
D-1	Demonstration Work in Pomology:		
	Salary, - - -	-$700.00	
	Travel, - - -	- 200.00	$ 900.00
D-2	Publications and Printing: - - - - - - -		500.00
D-3	Demonstration Work in Animal Husbandry;		
	Salary,- - -	- 700.00	
	Travel, - - -	- 200.00	900.00
D-4	Demonstration by means of Boys' and Girls' Clubs:		
	Salary, - - -	- 500.00	
	Travel, - - -	- 500.00	1000.00

D-5 Farm Management Demonstrations:

Salary,- - - -	420.00	
Travel,- - - -	760.00	
Supplies & Equip.,	100.00	1280.00

D-6 Demonstrations in Poultry Husbandry:

Salary,- - - -	1500.00	
Travel,- - - -	500.00	
Supplies & Equip.,	100.00	2100.00

D-7 Demonstrations in Home Economics:

Salaries, - - -	1983.34	
Travel,- - - -	750.00	2733.34

D-8 Demonstrations in Dairying:

Salary,- - - -	800.00	
Travel,- - - -	200.00	1000.00

D-9 Demonstrations by means of Extension Schools: 700.00

D-10 Demonstrations in Market Gardening: - - - - 800.00

D-11)
) No Smith-Lever Funds used.
D-12)

D-13 Demonstration Work through Teachers of Agriculture. 600.00
(Voted at March Meeting)

D-14 Farm Management Demonstrations through Faunce Farm:

Salary,- - - - - - - - -	-400.00
Contingent, - - - - - - - - -	8.66
	12922.00

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It was

VOTED: That it be the sense of this Committee that Mr.H.F.Tompson should be continued for one year from July 1, 1915 in extension work in Market Gardening with the understanding that the Market Gardening growers will contribute $1000. toward the expense of maintaining Mr.Tompson, and that Mr. Tompson will give not less than two-thirds of his time to field work. Service of H.F.Tompson

There followed a discussion of the relation of the college to Farm Bureau work in the various counties of Massachusetts, and it was

Distribution of Funds for Farm Bureaus.

VOTED: To endorse the idea of an equal distribution of Federal and State funds among the counties of the state, and to instruct Director Hurd to prepare and present to this Committee a detailed statment of the proposed redistribution.

It was

Barnstable County.

VOTED: To rescind the votes of this Committee passed March 9, 1915, whereby the sum of $400. was assigned for additional field work in Barnstable County, and the sum of $600. was assigned for special work with high school teachers of agriculture.

It was

Pig Clubs.

VOTED: To accept the offer of the U.S.D.A. to contribute $1500. per year toward the salary of a man to organize pig clubs, and to assign such part of the $1000. allotted from Smith-Lever funds for boys and girls' club work, as may be necessary to carry out this project.

It was

Summer School Salaries.

VOTED: To recommend to the Finance Committee extra salaries for the summer school and boys' camp of 1915 in accordance with the following schedule:

Course:	Name:	Exercises:	Salaries:
1.	Warren S. Baker,	20	$100.00
2	Mr. Quaife,	20	100.00
3	Professor Lockwood,	20	100.00
4	Mr. Coons,	8	40.00
5	Professor Graham,	20	100.00
6	Professor Foord,	10	50.00
8	Professor Sears,	20	100.00
9	Mr. Tompson,	20	100.00

Course:	Name:	Exercises:	Salaries:
10	Professor Nehrling,		
11	" "	20	$ 100.00
12	Professor Clark,		
13	" "	20	100.00
14	Professor Waugh,	10	50.00
16	Professor Peters,		
17	Professor Peters,	20	100.00
18	Mr.McLaughlin ,	10	50.00
19	Professor Osmun,		
20	" "	20	100.00
21	Mr. Maynard,	20	Travel and 200.00
22	Professor Fernald,	20)	
23	" "	20)	200.00
24	Dr. Gates,	10	50.00
25	Miss Hopkins,)		
26	" ")	20	100.00
27	" ")		
31	Mr. Ried,	25	Travel and 125.00
32	Mr. Ruetschi,	30	Travel and 150.00
33	Miss Ida Hall,	10	Travel and 50.00
37	Mr. Chenoweth,	10	50.00
Miss Josephine Hall - Adviser for Women,			Expenses and 50.00
Harold M. Gore - Boys' Camp Director,			100.00
Samuel R.Parsons, - Boys' Camp Sergeant,			45.00
Leone E. Smith, Scout Master,			30.00
John B. Minor, Jr., Assistant,			25.00
Sergeant Lee - Camp Inspector,			10.00

It was

Repairs and Improvements Extension Service Funds.

VOTED: That this Committee does not concur in the vote of the Buildings and Grounds Committee of April 2, 1914, relative to repairs and improvements to college buildings being paid for from Extension Service funds when such buildings are used by the Extension Service, and that it respectfully refers the question to the Finance Committee for consideration.

The Committee discussed the question of securing additional funds for Extension Service.

It was

Support of Short Courses.

VOTED: To be the sense of the Committee that the support of the short courses should be a charge against college funds rather than against the account of the Extension Service, and that such a transfer should be made as soon as practicable.

In executive session the Committee considered the question of Director Hurd's salary, and it was

VOTED: To call the attention of the Board of Trustees to its vote of June 17,1913 relative to Director Hurd's salary. Salary of Prof. Hurd.

Meeting adjourned.

MINUTES OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, Jan.8, 1916, at 9:30 a.m.

PRESENT: Messrs. Howe, Dewey, Ellis, Frost, Gannon, and President Butterfield; Director Hurd was also present.

The President presented for record Executive Orders covering various questions of administration during the summer of 1915; these Orders were confirmed:

1. Appointing Mr. E. D. Waid Acting Director of the Extension Service and Acting Supervisor of Short Courses during the absence of Director Hurd from July to September, 1915. — E.D. Waid, Acting Director.

2. Authorizing the payment from Extension Service funds of the entire salary of Prof. R.H. Ferguson from date of July 1, 1915. — R.H.Ferguson, Salary.

3. Terminating the agreement between the College and the Hampden County Improvement League whereby from date of September 30, 1915, the College should cease to contribute $1000. per year to the salary of Mr. John A. Scheuerle. — Hampden County Improvement League.

4. Authorizing the following compensation to those managing the Boys' Camp:

   Harold M. Gore, Board and $100.
   Samuel R. Parsons, Board and $45.
   John B. Minor, Board and $25.
   John J. Lee, $10.
   Jack Hardy, Board and Travel,
   John A. Chapman, Board, Travel, and $15.

5. Authorizing the following compensation for instructors in the Summer School:

   Gardner W. Boyd, $125.
   Miss Ruth Kingman, $32.
   A. H. MacLennan, $100. and Travel.

6. Authorizing the payment to Mr. L.B.Boston of the Faunce Demonstration Farm, of salary at the rate of $1000. per year for July, 1915, and at the rate of $100. per year thereafter.

The President reported for record the death of Prof. R. H. Ferguson as having occurred December 1, 1915.

It was

Payment to deceased members of the Staff.

VOTED: To recommend to the Trustees that unless the Attorney General rules adversely, the College pay to the heirs of the late R. H. Ferguson, the salary which would have been due him December 31, 1915.

Further that this action be regarded as establishing a precedent in matters of this kind.

It was

M.R. Case, Resignation.

VOTED: To accept the resignation of Miss Mabel R. Case as First Clerk in the Extension Service, to take effect January 15, 1916.

W.F.Turner, Appointment.

VOTED: To confirm the appointment of Mr. W.F. Turner as Extension Instructor in Animal Husbandry at a salary of $1700. per year.

B.W.Ellis, Resignation.

VOTED: To accept the resignation of Mr. B. W. Ellis as Assistant State Leader, to take effect December 31, 1915.

S.R.Parker, Appointment.

VOTED: To confirm the appointment of Mr. Sumner R.Parker as Assistant State Leader and Extension Professor of Rural Organization, at a salary of $3000. per year.

The President reported the following vote of the Trustees:

Work in Civic Betterment and Community Organization.

"That it is the sense of the Trustees that extension work in civic betterment and community organization should be continued."

L.S.Hadfield, Salary.

VOTED: To recommend to the Finance Committee that the salary of Miss Lillian Hadfield be $660. per year from September 1, 1916.

E.F.Damon, Appointment.

VOTED: To recommend to the Trustees the appointment of Mr. E.F. Damon as Extension Associate Professor of Agricultural Economics, at a salary of $2000. per year, same to take effect February 1,1916.

F.A.C.Smith, Appointment.

VOTED: To recommend to the Trustees the appointment of Mr. Frank C. Smith as Extension Instructor in Civic Improvement at a salary of $1800. per year, same to take effect February 1, 1916.

E.L.Arnold, Appointment.

VOTED: To recommend to the Finance Committee the appointment of Mr. Elbert L. Arnold to the position made vacant by the resignation of Miss Mabel R. Case, at a salary of $1000. per year, and that the precise title be determined after the President and Director Hurd have given the matter further thought.

The Director presented the budget and apportionment for Extension Service and Short Courses for the year ending November 30, 1916, and it was

VOTED: To recommend to the Finance Committee and to the Trustees the adoption of these apportionments as presented.

Meeting adjourned,

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, April 14, 1916, at 3:45 p.m.

PRESENT: Messrs. Howe, Ellis, Dewey, Frost, Gannon and President Butterfield; Director Hurd was also present.

The following recommendations relative to salary increases were made to the Finance Committee and to the Trustees:

Extension Service.

Name:	Title and Department:	Present Salary:	Increase Rec. by Director:	Increase Rec. by President:	Committee Recom.:
E.N.Boland,	Instructor in Pig Club Work,	$1500.	$ 300.	$300.	$150.
W.H.Bronson,	Instructor in Farm Demonstrations,	1475.	325.	325.	175.
Miss Comstock,	Professor of Home Economics,	2100.	100.	100.	100.
E.F. Damon,	Asso.Prof. of Agr. Economics,	2000.			
E.H. Forbush,	Correspondence Courses,	1850.	150.	150.	50.
J.C.Graham,	Professor of Poultry Husbandry,	---	100.	100.	100.
W.D. Hurd,	Director,	4200.			
W.P.B.Lockwood,	Professor of Dairying,	---	100.	100.	100.
A.G. Lunn,	Instructor in Poultry Husbandry,	1800.	200.	200.	100.
E.L. Morgan,	Prof. of Community Planning,	2200.		100.	100.
O.A. Morton,	Professor of Agr. Education,	2450.	150.	50.	50.
Miss Nash,	Instructor in Agr. Education,	1100.	100.	100.	100.
S.H. Parker,	Assistant State Leader,	3000.	500.	500.	500.
R. W.Rees,	Instructor in Pomology,	2050.	150.-200.	150.	100.
Miss Sayles,	Instructor in Home Economics,	1400.	100.	100.	100.
F.A.C. Smith,	Instructor in Civic Improvement,	1800.			
H.F.Tompson,	Professor of Market Gardening,	----			
W.F. Turner,	Instructor in Animal Husbandry,	1700.	100.	100.	100.
E. D. Waid,	Assistant Director,	2250.			

It was

VOTED: That in case the Finance Committee does not approve of the recommendations made by this Committee relative to salary increases, the Finance Committee be requested to return the schedule to this Committee for revision.

It was

VOTED: To recommend to the Finance Committee the extra compensation for summer school instruction for 1916 in accordance with the accompanying schedule:

Extra Compensation.

Name:	Amount:	
C.J. Maynard,	$200.	& travel.
Earl Jones,	$100.	
J.C.McNutt,	100.	
W.P.B.Lockwood,	100.	
Samuel Coons,	40.	
J.C.Graham,	130.	
J.A. Foord,	50.	
W.W. Chenoweth,	130.	
A.S. Thomson,	230.	
A.H. Nehrling,	100.	
W.D.Clark,	100.	
F.A. Waugh,	50.	
C.A.Peters,	150.	
F.A. McLaughlin,	50.	
A.V. Osmun,	100.	
H.T. Fernald,	200.	
B.N. Gates,	50.	
F.W. Reid,	150.	& travel
Ernst Hermann,	200.	& travel
Ida E. Hall,	50.	& travel
W. R. Hart,	55.	
A.E. Cance,	30.	
Samuel R. Parsons,	75.	
Leone E. Smith,	100.	
3 monitors to be chosen for Boys' Camps.	100.	(est.)
H. Higginbotham,	50.	
F. Josephine Hall,	75.	& travel.
Total...	$2765.	

It was

VOTED: To approve the apportionment of the Smith-Lever funds for the year ending June 30, 1917, in accordance with the accompanying schedule:

Smith-Lever Projects.

APPORTIONMENT OF SMITH-LEVER FUNDS
July 1, 1916 to June 30,1917.

Available Funds:

Regular Apportionment,	$12930.75
Increase July 1, 1916 to June 30,1917,	2442.30
	$15373.05

State Smith-Lever Offset Funds ($5375.05) to be taken from:

State Funds Project D-10	$2700.00
State Funds Project D-4	2673.05
	5373.05

Project	Approved Apportionment 1915:1916:		Suggested Apportionment 1916-17.	
D-1 Pomology				
1/3 Salary (Rees)	$ 700.		$733.33	
1/3 travel (Rees)	200.	$ 900.	200.	$ 933.33
D-2 Printing & Publications	500.	500.	600.	600.
D-3 Animal Husbandry				
1/3 salary (Story)	700.		600.	(Turner)
1/3 travel (Story)	200.	900.	200.	800.
D-4 Boys' & Girls' Clubs				
travel, (Boland)	500.		500.	
maintenance,	500.	1000.	500.	1000.
D-5 Farm Management Dem.				
salary (Bronson)	374.25		700.	
travel,	500.		500.	
supplies,	100.	974.25	100.	1300.
D-6 Poultry Husbandry				
salary (Lunn) 11-2/3 mos.	1700.		2000.	
travel,	500.		500.	
supplies,	100.	2300.	100.	2600.
D-7 Home Economics				
1/3 salary (Comstock)	700.		733.33	
1/3 travel (Comstock)	150.		150.	
salary (Sayles) 11 mos.	1386.67		1500.	
travel (Sayles)	450.	2686.67	450.	2833.33
D-8 Dairying				
1/3 salary (Lockwood)	850.		850.	
travel (Lockwood)	200.		200.	
supplies,		1050.	200.	1250.
D-9 Extension Schools				
salaries,	700.		700.	
maintenance,				
travel,		700.		700.

D-10 County & District Agents

*1/2 salary (Parker)			$1750.	
1/2 travel (Parker)			360.	
Market Garden Dist. (Tompson)	$800.		200.	
Hampden Co. (Jenks)	200.		200.	
Hampshire Co. (McDougall)	200.		200.	
Plymouth Co., (Tupper)	300.		300.	
Norfolk Co., (Munson)	300.	$1800.		$ 3310.
		$12810.92		15326.66
Unapportioned & Emergency Funds,		119.83		46.39
Total - - -		$12930.75		$15373.05

*Remainder to be met (expected) from U.S.D.A. Cooperative Demonstration funds.

It was suggested that a meeting of this Committee be held at Amherst May 26th, at which time certain members of the Extension Service staff should have an opportunity to present a brief statement of their work.

MINUTES OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Draper Hall, M.A.C., Saturday, May 26,1916, at 12 o'clock noon.

PRESENT: Messrs. Dewey, Frost, Gannon, and President K.L. Butterfield; Director Hurd was also present.

Dr. Dewey was elected Chairman pro tem. Director Hurd recommended the following changes in title, and it was

VOTED: To adopt the following titles for the positions indicated: Titles

Sumner R. Parker, Extension Professor of Rural Organization, and County Agent Leader.

Orion A.Morton, Extension Professor of Agricultural Education, and Boys' and Girls' Club Leader.

R. W. Rees, Associate Professor of Pomology in the Extension Service.

On the recommendation of Director Hurd it was

VOTED: To make the allotment of College funds to the Market Garden Extension district $1200. subject to the securing of the amount of $600. from the proposed new Bill for market garden station. Funds for Market Garden Work.

The remainder of the afternoon was given over to reports from various Departments of the Extension Service as follows:

2:00 (30 minutes) County Agent Work

2:35 (30 minutes) Farm Management

3:10 (30 minutes) Boys' and Girls' Clubs

3:45 (30 minutes) Civic Improvement

4:20 (30 minutes) Community Planning

4:55 (30 minutes) Correspondence Courses.

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, January 4,1917, at 11:30 a.m.

PRESENT: Messrs. Dewey, Ellis, Gannon, Wilfrid Wheeler, and President Butterfield; Director Hurd was also present.

In the absence of Mr. Howe, Mr. Ellis served as chairman.

Director Hurd presented the budget and apportionment of funds for Extension Service and Short Courses for the ensuing year, and after discussion, it was

VOTED: To adopt as presented the budget and apportionment for Extension Service for the year ending November 30,1917, and to recommend the same to the Finance Committee and the Trustees. Budget Ext.Serv.

In connection with the above vote, Mr. Wilfrid Wheeler requested to be recorded as opposed to any apportionment of funds for work in Local Community Organization, Rural Civic Planning, and Cooperative Marketing. Mr. Gannon requested to be recorded as opposed to any apportionment of funds for work in Local Community Organization.

VOTED: To adopt as presented the budget and apportionment for Short Courses for the year ending November 30,1917, and to recommend the same to the Finance Committee and the Trustees. Budget, Short Courses.

Director Hurd reported the resignation of Mr. Earnest D. Waid as Assistant Director of the Extension Service, and it was Resignation, Prof.E.D.Waid

VOTED: To accept the resignation of Mr. Earnest D.Waid, Assistant Director of the Extension Service, and to authorize the President and Director to fill at their discretion the vacancy thus caused.

Director Hurd reported that with the approval of the President, Mr. A.V.Rice had been elected to the position of Extension Instructor in Charge of Pig Club Work, made Appointment, A.V.Rice.

vacant by the resignation of Mr. E.N. Boland, and that Mr. R. W.Henninger had been appointed Extension Instructor in Charge of Poultry Club Work, this being a new position the salary of which is paid by the U.S.D.A.

Appointment, R.W.Henninger

VOTED: To recommend to the Finance Committee and the Trustees that from date of February 1,1917, the salary of F.A.C.Smith be $2000. per year.

Salary, F.A.C.Smith

Meeting adjourned.

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Hotel Bellevue, Boston, April 13,1917, at 12:00 M.

PRESENT: Messrs. Howe, Ellis, Frost, Gannon, and President Butterfield.

On recommendation of the President it was

VOTED: That the following tentative plan for the administration of short courses be approved:

A.S.Thomson, Status.

1. That Professor Andrew S.Thomson shall have full detailed charge of the management of short courses.

2. That Professor Thomson shall work on general policies approved by Director Hurd, and Director Hurd shall inspect bills before being sent to the Treasurer for payment.

3. That no title shall be given Professor Thomson for the present, but that his letterheads and all printed matter in which he is to be designated, be signed by him as "In charge of Summer School" or "In charge of Winter School".

It was

B.W.Shaper, Appointment.

VOTED: To recommend to the Trustees the confirmation of the appointment of Mr. B.W.Shaper as Assistant to the Director of the Extension Service at a salary of $2000. per year, the same having taken effect March 1,1917.

On motion of Mr. Frost it was

W. D.Hurd, Leave of Absence and Salary.

VOTED: To recommend to the Trustees that Director Hurd be granted a leave of absence from approximately November 1,1917 to September 1,1918 and that during this period his salary be at the rate of $250. per month. Further that from the date of his return his salary be $4500. per year.

On motion of Mr. Frost it was

VOTED: That in case the Trustees favor salary increases this year, the Extension Service Committee recommend the following increases:

SALARIES FOR 1917.

Name:	Title and Department:	Present Salary:	Increase Rec.by Committee:
W.H.Bronson,	Instructor in Farm Management Dem.,	$1650.	$200.
Miss Comstock,	Professor of Home Economics, and Leader of County Work for Women,	2200.	100.
E.F.Damon,	Asso.Professor of Agricultural Economics,	2000.	200.
G.L.Farley,	Supervisor of Junior Extension Work,	3000.	250.
E.H.Forbush,	Supervisor of Correspondence Courses,	1900.	100.
*J.C.Graham,	Professor of Poultry Husbandry,		
W.D.Hurd,	Director & Supervisor of Short Courses,	4200.	
A.D.Kilham,	Instructor in Pomology,	1800.	200.
*W.P.B.Lockwood,	Professor of Dairying,		
A.G.Lunn,	Instructor in Poultry Husbandry,	1900.	200.
E.L.Morgan,	Professor in Community Planning,	2300.	100.
Miss Nash,	Instructor in Agricultural Education,	1200.	100.
S.R.Parker,	Professor of Rural Org. & County Agent Leader,	3500.	
V.A.Rice,	Instructor in charge of Pig Club Work,	1500.	
Miss Sayles,	Instructor in Home Economics,	1500.	150.
B.W.Shaper,	Assistant to Director,	2000.	
F.A.C.Smith,	Instructor in Civic Improvement,	2000.	
*H.F.Tompson,	Professor of Market Gardening,		
W.F.Turner,	Instructor in Animal Husbandry,	1800.	200.

Meeting adjourned.

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MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

Draper Hall, M. A. C., December 21, 1917, at 6:30 p.m.

PRESENT: Messrs. Dewey, Ellis, Gannon, Frost, and President Butterfield; Dr. A. C. True, Mr. C.B. Smith, Professor W. D.Hurd, Mr.A.D.Kilham and Mr. S. R. Parker were also present.

In the absence of Mr. Howe, Mr. Ellis was chosen Acting Chairman.

County Farm Bureau Law

Dr. True, Mr. Smith and Director Hurd led a discussion relative to a new County Farm Bureau law, which is made necessary by recent state legislation. On motion of Mr. Frost, it was

VOTED: To request Mr. Parker to present to the Trustees a draft of the new County Farm Bureau law as it may be developed by the Committee of the Farm Bureau Federation, designated to prepare such a law.

Conference with Eastern States Exposition.

Director Hurd reported on the conference recently held with other extension leaders of eastern states and with representatives of the Eastern States Exposition, relative to farmers' exchange organizations in the eastern states to be promoted by the Eastern States Exposition. He stated that projects for work of this character will be considered by a committee consisting of the New England Agricultural College Presidents and representatives of the Eastern States Exposition.

Director Hurd presented the budget for expenditures for the extension service for the ensuing year, and also presented a tentative budget for emergency appropriations. After a lengthy discussion, and on motion of Mr. Gannon, it was

VOTED: To refer to the Trustees without recommendation the question of a budget for emergency extension work in agriculture in 1918.

It was

VOTED: To approve the budget and apportionment for current expenses, as presented, provided that if no other funds are granted for extension work in 1918, the total expenditures shall be limited to funds actually available. Current budget and apportionment

It was

VOTED: To recommend to the Trustees that the amount of $65,000. be requested as the state appropriation for extension work in 1918. State Appropriation 1918.

Meeting adjourned.

Ralph J. Watts,
Clerk.

MINUTES OF MEETING OF TRUSTEES' COMMITTEE ON EXTENSION SERVICE.

City Club, Boston, September 19, 1918, at 3:30 p.m.

PRESENT: Messrs. Howe, Ellis, Bowditch, Butterfield; also Director Hurd.

The President reported the following list of changes in the staff of the Extension Service:

RESIGNATIONS:

Name:	Title:	Effective:
Marie Sayles,	Ext. Asst.Prof. of Home Economics,	June 30,1918.
Mrs. F.A.C.Smith,	Ext.Asst. In Home Economics,	June 30,1918.
Mrs. R.H.VanMeter,	Ext.Asst.in Home Economics,	Aug. 31,1918.

NEW APPOINTMENTS:

		Salary:	Effective:
Wm.F.Howe,	Asst.Supervisor,Junior Ext.Work,	$2500.	May 6,1918.
Wm.C.Monahan,	Ext.Asst.Prof.of Poultry Husb.,	2000.	Aug.15,1918.

LEAVES OF ABSENCE FOR WAR SERVICE:

H.D.Drain,	Instructor in Dairying,	$1800.	June 14,1918.
R.H.Van Meter,	Instructor in Pomology,	1500.	June 1,1918.

TRANSFER:

Earl Jones, - From Instruction Staff to Extension Service Staff as Extension Asso. Professor of Agronomy, $2400. July 1, 1918.

It was

VOTED: To confirm the action of the President in accepting the above resignations and making new appointments.

The President called attention to the authorization of the Trustees to separate the administration of the Short Courses from that of the Extension Service, and that a Director of Short Courses had been appointed.

On recommendation of the Director, it was

VOTED: To recommend to the Trustees that the salary of L. Wayne Arny, Supervisor of Correspondence Courses and Editor of Extension Service Publications, be at the rate of $2200. per year, same to take effect Sept. 1, 1918.

The Director stated his plan which was endorsed by the President, for some reorganization in the administrative plan of the Extension Service, by which Mr. Parker should become State Leader in the field of practical agriculture, leaving the vacancy as State Leader of County Agents to be filled at some later date, and other similar changes.

It was

VOTED: To endorse the general plan of reorganization as presented.

On recommendation of the Director, it was

VOTED: To recommend to the Trustees that the salary of E.L.Morgan, Extension Professor of Community Planning, should be at the rate of $2500. per year, same to take effect September 1, 1918.

On recommendation of the Director, it was

VOTED: That the salary of Miss Helen Norris, Extension Instructor in Agricultural Education, Should be $500. from the Extension Service funds, with the understanding that the federal government pay her salary at the rate of $1000. per year, same being effective as of September 1, 1918.

On recommendation of the Director, it was

VOTED: To recommend to the Trustees that the salary of Mr. George L. Farley, Supervisor of Junior Extension Work, should be at the rate of $3500. per year, the same to take effect September 1, 1918.

The Director made certain recommendations in regard to increase of salary for Mrs. Woolman, Mrs. Reed and Miss Gifford, on account of the unwillingness of Washington to pay its proportion of the salaries that would be necessary in order to retain the desired quality of service; it was

VOTED: To make such an adjustment in the salaries of Mrs. Woolman, Mrs. Reed and Miss Gifford as will retain them on the Extension Service Staff.

The Director expressed a desire to secure the services of Professor W.P.B.Lockwood as Assistant Director at as early a date as possible.

It was

VOTED: To authorize the President and the Director of the Extension Service to ask Professor Lockwood to consider accepting the position of Assistant Director of the Extension Service at a salary of $3600. per year, at such time as may be mutually agreed that he will come back into the service of the institution.

The Director presented the details of the budget needed for the Extension Service during the coming fiscal year, and it was

VOTED: To recommend to the Trustees that the Legislature be asked to appropriate for the projects contemplated in the Director's budget, the sum of $116,656.00 for the fiscal year beginning December 1, 1918.

Committee adjourned.

K.L.Butterfield,
Secretary.

MINUTES OF JOINT COMMITTEE MEETING OF COMMITTEES

ON FINANCE AND EXTENSION SERVICE?

Held Boston, October 9, 1918,

FILED IN WITH MINUTES OF FINANCE COMMITTEE.